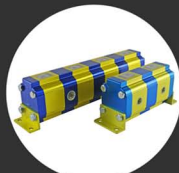




Hydraulics Network

AUSTRALIAN OWNED INDEPENDENT HYDRAULICS WHOLESALER



2021
PRICELIST

HYDRAULICS NETWORK

Servicing the whole of Australia from these locations:

VIC

MELBOURNE



23 Quinlan Road, Epping, Victoria 3076



03 9399 8957



03 9397 4742



sales@hydraulicsnetwork.com.au



QLD

BRISBANE



29 Annie Street, Coopers Plains, Queensland 4108



07 3277 5969



07 3277 8931



salesqld@hydraulicsnetwork.com.au

All prices stated within are exclusive of GST

(All prices are correct as of January 1st 2021, but Hydraulics Network reserve the right to change these prices without notice)

For our Terms & Conditions, please see pages at back of pricelist

Note: Full technical product specifications can be downloaded from our website

www.hydraulicsnetwork.com.au

CONTENTS

4

NEW PRODUCTS FOR 2021

Including Continuous Duty Power Units, Group 2 Pump Priority Heads, Group 0 Flow Dividers, Certified Australian-Made Cylinders, Minter Tank Accessories & more...



9

Hydraulic Power Units, Parts & Accessories

DC & AC Power Units, Continuous Duty Power Units, Industrial Power Units, Petrol & Diesel Power Units, Controllers, Tanks, DC & AC Motors, Start Solenoids, Accessories



37

Hand Pumps, Diverter & Ball Valves

Manual Diverter Valves, Solenoid Diverter Valves, Ball Valves, Locking Devices, Hand Pumps & Tanks



49

Inline & Cartridge Valves

Counter Balance, Hose Burst, Check, Needle & Barrel Flow Controls, Dividers, Relief, Sequence, Cartridge, Unloading, Pressure Reducing, Rotating Couplings



75

Cetop Valves, Subplates & Manifolds

Cetop 3, 5 & 7 Solenoid Valves, Manual Solenoid, Subplates, Manifolds, Coils, DIN Plugs, Sandwich Valves, Endplates, Relief Cartridges



117

Gear Pumps, Motors & Flow Dividers

Group 1, 2 & 3 Pumps, Log Splitter Pumps, Group 1, 2 & 3 Gear Motors, Gear Flow Dividers



157

Power Transmission

Bell Housings, Motor & Pump Side Couplings, PTO Speed Increase Gearboxes, EM Clutches, Spline Drive Couplings, Bearing Mounts, Vibration Absorbers, Gaskets



169

Tank & Tank Accessories

Steel Tanks, Lids & Gaskets, Push In & Threaded Filler Breathers, Sight Gauges & Diffusers, Level Gauges, Suction Strainers



183

Gauges & Test Couplings

Pressure Gauges & Accessories, Pressure Gauge Kits, Test Couplings, Gauge Adaptors, Test Hoses, Hose Tails, Pressure Switches





Piston Pumps

Axial Piston Pumps & Controllers

195



Hydraulics Motors

BMM, BMP & BMPH Gerotor Motors, BMR, BMRS, BMSY, BMV & BMT Geroler Motors, Hydraulic Brakes & Motor Valves

199



Monoblock Valves

MB2, MB3, MB4, MB5 & MB6 Monoblocks, Log Splitter Valves, Remote Control Accessories

221



Sectional Valves

SN3, SN4, SN6 & SN8 Sectional Valves, Remote Control Accessories

235



PV4 Proportional Valves

Pump-Side Modules, Load Sense Solenoid Unloading Valves, Pilot Oil Supply Adaptors, Levers, Spool Assembly, Port Relief Shock & Suction Valves, Controllers, Seal & Bolt Kits

245



Hydraulic Cylinders

TAG Cylinders, Short Closed Length, Toplink, Special Length, Log Splitter, Chute Jack, Landing Legs, Phasing, Clevises, Pins, Plugs & Breathers, Whoa Stops



251



Filtration

Spin On Filters, Filter Heads, Gauges, Filtration Carts, Tank Top Return Filters, Pressure Filters, Indicators

267



ASA Coolers & Accessories

Lowline, TT Rail, ASA, CC, Connector Kits, Brazed Plate Heat Exchangers, Compensators, Vibration Mounts, Pump Units

287



Sovatec Axial Fans

12V & 24V Axial fans

313

NEW PRODUCTS

PREMIUM PRODUCTS



Throughout this 2021 pricelist you will notice some pages include the Italian flag.

The flag indicates a premium product, manufactured in Italy to the highest quality.

Some products are offered in both premium and standard options, to suit your budget.



NEW PRODUCTS FOR 2021

Aside from the new products listed in this section, there are many other new items available in stock for 2021. We have added over 200 new items this year!

They are marked throughout the pricelist with the icon shown here



CONTINUOUS DUTY POWER UNITS - see page 12

We now stock a range of continuous duty power units, available as 0.25kW to 0.75kW, 240v and 415v.

Manufactured by Mocen, the BP13 series are of the same high standard as all our other power units.



NEW PRODUCTS

HYDRAULIC CYLINDERS - see page 253

Buy Australian - our standard hydraulic cylinders are now officially certified as Australian Made!

Made by Tuff Manufacturing in Queensland.



WIRELESS PENDANT CONTROLLERS - see page 35

We have a brand new range of wireless pendant controllers!

A & B functions allow switching transmitter from one system to another, with LED indicators showing which system is in use.

Frequency range is 915 > 928 Mhz, and they meet all Australian standards.

GROUP 2 PUMP PRIORITY HEADS - see page 125

Priority heads for both internal excess flow and external excess flow for Group 2 pumps.

Manufactured in Italy by Vivoil.



NEW PRODUCTS

GROUP 0 FLOW DIVIDERS - see page 152

Our range of high quality flow dividers from Italian manufacturer Vivoil now includes Group 0 options.

2-way and 4-way options are available and relief valves are incorporated in each section.



CETOP 3 SERIES MANIFOLDS - see page 113

We've added a range of Cetop 3 Series manifolds for 2021.

Available as 2, 3 or 4 stations, with 1/2" BSPP P+T ports.

These are made in Italy by Aidro.

VERTICAL LEVEL INDICATORS - see pages 180

Made in Italy by Mintor, these vertical level indicators are a float system level gauge, and are available between 200-400mm in length.



NEW PRODUCTS

10/11 TOOTH GROUP 2 PUMPS

- see page 129

Our range of high quality hydraulic pumps from Italian manufacturer Vivoil now includes Group 2 pumps with 10 or 11 tooth shafts and cast iron SAE-A mount front and rear covers.



OLEOWEB CARTRIDGE VALVES

- see pages 69-73

Our range of high quality Italian-made cartridge valves from Oleoweb has been expanded.

We have new ranges of cartridge reliefs, manifolds, pilot valve check, load shuttles, pressure compensated flow control, hand pumps and bi-directional flow.



MINTOR TANK ACCESSORIES - see page 179

Two more additions to our range of Italian made tank accessories from Mintor:

- * Flanged vertical level gauges
(3 size options)
- * Inspection port holes
(2 size options)



Industrial Power Units	10
Continuous Duty Power Unit Nomenclature Chart	12
Continuous Duty Power Units AC 240v & 415v (0.25kW - 0.75kw)	13
Continuous Duty Power Units AC 244v & 415v (1.1kW - 4.0kW)	13
Continuous Duty Power Units AC - Electric Motors & Pumps	14
Power Unit Nomenclature Chart	16
Micro Power Units DC (350w - 800w)	17
Power Units DC (1.6kW - 2.2kW)	18
High Power Units DC (2.5kW - 4.0kW)	22
Power Units AC 240v (1.1kW - 2.2kW)	25
Power Units AC 415v (1.1kW - 2.2kW)	26
Power Units AC 415v (3.0W - 4.0kW)	27
Petrol & Diesel Power Units	28
Power Unit DC Motors & Start Solenoids	29
Power Unit AC Motors	30
Power Unit Premium Gear Pumps 	30
Power Unit Standard Gear Pumps	31
Power Unit Accessories & Tank Options	32
Power Unit Pendant Controllers	34
Power Unit DIN Plugs	36

PREMIUM ITALIAN PRODUCT 

HYDRAULIC POWER UNITS

Industrial Power Units



TOTAL PRICE = GROUP 1 \$ + GROUP 2 \$ + GROUP 3 \$ + GROUP 4 \$

*Note: These prices are a guide only as every industrial power unit has different specifications.
Please contact us for a detailed quotation.*

GROUP 1 - Motor

Motor Size	List Price \$	Volts	Detail
0.55 kW	830.00	240v AC	The pricing within this group incorporates components that are arranged within the electric motor: motor, coupling, bell housing, gaskets.
0.75 kW	882.00		
1.1 kW	1141.00		
1.5 kW	1293.00		
2.2 kW	1494.00		
3.0 kW	1555.00		
0.55 kW	592.00	415v AC	
0.75 kW	731.00		
1.1 kW	917.00		
1.5 kW	999.00		
2.2 kW	1118.00		
3.0 kW	1303.00		
4.0 kW	1576.00		
5.5 kW	2039.00		
7.5 kW	2189.00		
11.0 kW	3414.00		
15.0 kW	3929.00		

GROUP 2 - Pump

Pump	List Price \$	Detail
Group 1 Pump	680.00	The pricing within this group incorporates components that are arranged within the pump(s) - based on Vivoil single pumps and tandem pumps: pump suction strainer, check valve, hose & fittings.
Group 2 Pump	979.00	
Group 3 Pump	1710.00	
Hi-lo Group 2/1 Tandem	1854.00	
Hi-lo Group 2/2 Tandem	2060.00	
Hi-lo Group 3/2 Tandem	2956.00	

GROUP 3 - Tank

Tank Size	List Price \$	Detail
10 L	556.00	The pricing within this group incorporates components that are arranged within the tank: tank lid filler breather & filters. Standard tank is powder coated and comes with filler breather, level temperature gauge, cork gasket and return filter.
25 L	1391.00	
40 L	1555.00	
70 L	1833.00	
120 L	2451.00	
200 L	2843.00	
300 L	3296.00	
400 L	3780.00	

GROUP 4 - Manifold & Valve

Valve Arrangement	STANDARD RANGE List Price \$	PREMIUM RANGE List Price \$	PREMIUM RANGE	DETAILS
1/2" P + T Manifold	330.00	n/a	115v AC 230v AC Coils add \$30.00	The pricing within this group incorporates components that are arranged within the manifold & valve: manifold, gauge, isolator, hose & fittings. A cartridge unloader valve is included with multiple valves. A pressure gauge is included as standard with the manifold.
3/4" P + T Manifold	464.00	n/a		
Cetop 3 - 1 valve	896.00	1102.00		
Cetop 3 - 2 valves	1267.00	1669.00		
Cetop 3 - 3 valves	1669.00	2271.00		
Cetop 3 - 4 valves	2009.00	2812.00		
Cetop 3 - 5 valves	2333.00	3337.00		
Cetop 3 - 6 valves	2709.00	3914.00		
Cetop 5 - 1 valve	1164.00	1643.00		
Cetop 5 - 2 valves	1509.00	2117.00		
Cetop 5 - 3 valves	1978.00	2889.00		
Cetop 5 - 4 valves	2508.00	3723.00		
Cetop 5 - 5 valves	3147.00	4666.00		
Cetop 5 - 6 valves	3744.00	5567.00		

Note: Standard Range of Cetops are manufactured in China, Premium Range are manufactured in Italy

Series	Motor & Voltage	Valve	Valve Type	Unload Valve	Suction	Pump CC	Tank	Special
BP13	025AA	132	E	U	H	42	5B	V

MOTOR	DESCRIPTION
240v AC	
025AA	0.25kW
037AA	0.37kW
055AA	0.55kW
075AA	0.75kW
11AA	1.1kW
15AA	1.5kW
22AA	2.2kW
3AA	3.0kW
37AA	3.7kW
415v AC	
025AC	0.25kW
037AC	0.37kW
055AC	0.55kW
075AC	0.75kW
11AC	1.1kW
15AC	1.5kW
22AC	2.2kW
3AC	3kW
37AC	3.7kW
4AC	4.0kW
All electric motors are 4 pole For more information, see page 15	

VALVE	DESCRIPTION
010	P & T
030	Single Acting
03M	Single Acting with override
131	1 x Double Acting
132	2 x Double Acting
133	3 x Double Acting

VALVE TYPE	DESCRIPTION
Z	Closed Centre
C	Tandem Centre
H	Open Centre
Y	A & B to T
S	Crossover S/A

SUCTION	DESCRIPTION
U	Unload Valve
-	No Unload

SUCTION	DESCRIPTION
H	Horizontal Mount
V	Vertical Mount

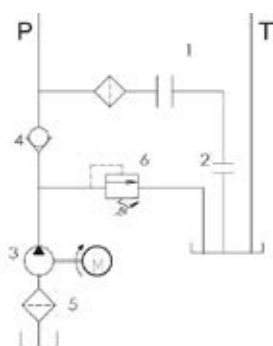
PUMP	DESCRIPTION
09	0.9 cc
12	1.2 cc
17	1.7 cc
21	2.1 cc
27	2.7 cc
32	3.2 cc
37	3.7 cc
42	4.2 cc
48	4.8 cc
58	5.8 cc
70	7.0 cc
80	8.0 cc
98	9.8 cc
Technical information - see page 15	

TANK	DESCRIPTION
2B	MT2AB 7.5L
3B	MT3AB 10L
4B	MT4AB 12L
5B	MT5AB 15L
8B	MT18AB 18L
4H	HR4ABC 22L
5H	HR5ABC 30L
6H	HR6ABC 35L
MP	No Tank
MPR	No Tank No Relief
Technical information - see page 33	

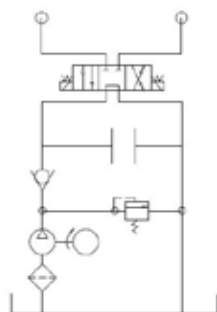
SPECIAL	DESCRIPTION
MPR	Motor Pump with Relief Valve
MP	Motor Pump
SW	Sandwich Valve
SWHP	Sandwich Valve Handpump
SWM	Sandwich Valve Manual Override
COV	CETOP Override
V	Vivoil Pump
Multiple special options separated by /	

NEW BP13 Series Power Unit - 240v, 0.25kW - 0.75kW

Part Number	List Price \$	Power	RPM	Volts	Function	Pump	Ports	Tank Usable	Relief Set
BP13-025AA010H083B	1855.00	0.25 kW	1320	240v AC	P + T	0.8 cc	9/16" UNO	10 L	1600 psi
BP13-037AA010H083B	1885.00	0.37 kW	1380			1.1 cc			2500 psi
BP13-055AA010H113B	2000.00	0.55 kW	1400						
BP13-075AA010H113B	2050.00	0.75 kW	1410						
BP13-025AA131CH083B	2105.00	0.25 kW	1320		D/A	0.8 cc			1600 psi
BP13-037AA131CH083B	2135.00	0.37 kW	1380			1.1 cc			2500 psi
BP13-055AA131CH113B	2250.00	0.55 kW	1400						
BP13-075AA131CH113B	2300.00	0.75 kW	1410						



010



131



Double Acting
supplied with 24v DC Coils

4 Pole Motor

Continuous Duty



NEW BP13 Series Power Unit - 415v, 0.25kW - 0.75kW

Part Number	List Price \$	Power	RPM	Volts	Function	Pump	Ports	Tank Usable	Relief Set		
BP13-025AC010H083B	1750.00	0.25 kW	1380	415v AC	P + T	0.8 cc	9/16" UNO	10 L	1600 psi		
BP13-037AC010H083B	1765.00	0.37 kW				1.1 cc			2500 psi		
BP13-055AC010H113B	1810.00	0.55 kW							1400	1600 psi	
BP13-075AC010H113B	1950.00	0.75 kW	1410			0.8 cc			2500 psi		
BP13-025AC131CH083B	2000.00	0.25 kW	1380		D/A	0.8 cc			1600 psi		
BP13-037AC131CH083B	2015.00	0.37 kW				1.1 cc			2500 psi		
BP13-055AC131CH113B	2030.00	0.55 kW							1400	1600 psi	
BP13-075AC131CH113B	2200.00	0.75 kW	1410			1.1 cc			2500 psi		

HYDRAULIC POWER UNITS

Continuous Duty Power Unit

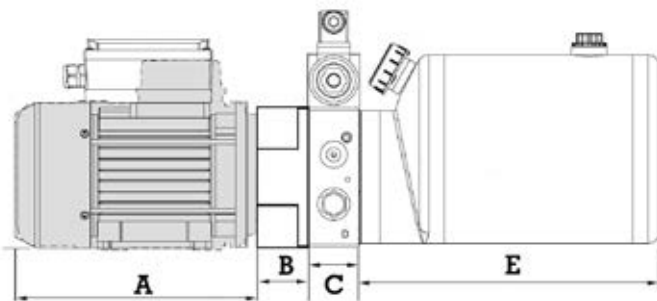
NEW BP13 Series Power Unit - 240v, 1.1kW - 3.7kW

Part Number	List Price \$	Power	RPM	Volts	Function	Pump	Ports	Tank Usable	Relief Set
BP13-11AA010H213B	2160.00	1.1 kW	1410	240v AC	P + T	2.1 cc	9/16" UNO	10 L	2500 psi
BP13-15AA010H213B	2300.00	1.5 kW	1420			4.2 cc		18 L	
BP13-22AA010H428B	2570.00	2.2 kW	1430			5.8 cc		30 L	
BP13-30AA010H588B	2740.00	3.0 kW	1440			8.0 cc		10 L	
BP13-37AA010H805H	3100.00	3.7 kW			D/A	2.1 cc		18 L	
BP13-11AA131CH213B	2400.00	1.1 kW	1410			4.2 cc		30 L	
BP13-15AA131CH213B	2530.00	1.5 kW	1420			5.8 cc		10 L	
BP13-22AA131CH428B	2820.00	2.2 kW	1430			8.0 cc		18 L	
BP13-30AA131CH588B	2985.00	3.0 kW	1440			2.1 cc		30 L	
BP13-37AA131CH805H	3355.00	3.7 kW							

NEW BP13 Series Power Unit - 415v, 1.1kW - 4kW

Part Number	List Price \$	Power	RPM	Volts	Function	Pump	Ports	Tank Usable	Relief Set
BP13-11AC010H213B	2080.00	1.1 kW	1410	415v AC	P + T	2.1 cc	9/16" UNO	10 L	2500 psi
BP13-15AC010H213B	2200.00	1.5 kW	1420			4.2 cc		18 L	
BP13-22AC010H428B	2300.00	2.2 kW	1430			5.8 cc		30 L	
BP13-30AC010H588B	2480.00	3.0 kW	1440			8.0 cc		10 L	
BP13-40AC010H805H	2700.00	4.0 kW			2.1 cc	18 L			
BP13-11AC131CH213B	2350.00	1.1 kW	1410		D/A	4.2 cc		30 L	
BP13-15AC131CH213B	2400.00	1.5 kW	1420			5.8 cc		10 L	
BP13-22AC131CH428B	2560.00	2.2 kW	1430			8.0 cc		18 L	
BP13-30AC131CH5808B	2600.00	3.0 kW	1440			2.1 cc		30 L	
BP13-40AC131CH805H	2950.00	4.0 kW				4.2 cc		18 L	

Double Acting
supplied with 24v DC Coils



For tank dimensions (E) see page 33

Motor Size

Motor Power	A (240v)	A (415v)	B	C
	Dimension (mm)			
0.25 kW	230	210	58	43
0.37 kW	225	215		
0.55 kW	250	240		
0.75 kW				
1.1 kW	285	260	68	
1.5 kW	315	290		
2.2 kW	340	320	90	
3.0 kW	360			
3.7 kW	370	370		
4.0 kW	n/a	335		

NEW BP13 240v AC Electric Motors

Part Number	List Price \$	Power	Voltage	Full Load Amps	IP	RPM	Frame	Shaft
EM1-4-0.25-14-71-B14	325.00	0.25 kW	240v AC	1.9 a	55	1320	71	14 mm
EM1-4-0.37-14-71-B14	360.00	0.37 kW		2.7 a		1380		
EM1-4-0.55-19-80-B14	450.00	0.55 kW		3.6 a		1400	80	19 mm
EM1-4-0.75-19-80-B14	500.00	0.75 kW		4.5 a		1410		
EM1-4-1.1-24-90-B14	595.00	1.1 kW		6.5 a		1420	90	24 mm
EM1-4-1.5-24-90-B14	720.00	1.5 kW		8.7 a		1430		
EM1-4-2.2-28-100-B14	925.00	2.2 kW		12.1 a		1440	100	28 mm
EM1-4-3-28-100-B14	1090.00	3 kW		16.3 a				
EM1-4-3.7-28-100-B14	1450.00	3.7 kW		19.8 a				

Note: All motors up to 2.2kW fitted with manual reset overload

NEW BP13 415v AC Electric Motors

Part Number	List Price \$	Power	Voltage	Full Load Amps	IP	RPM	Frame	Shaft
EM3-4-0.25-14-71-B14	210.00	0.25 kW	415v AC	0.75 a	55	1380	71	14 mm
EM3-4-0.37-14-71-B14	230.00	0.37 kW		1.03 a				
EM3-4-0.55-14-71-B14	290.00	0.55 kW		1.60 a		1400	80	19 mm
EM3-4-0.55-19-80-B14	310.00			1.63 a				
EM3-4-0.75-19-80-B14	395.00	0.75 kW		1.94 a		1410	90	24 mm
EM3-4-1.1-24-90-B14	515.00	1.1 kW		2.6 a				
EM3-4-1.5-24-90-B14	595.00	1.5 kW		3.4 a		1420		
EM3-4-2.2-24-90-B14	705.00	2.2 kW		5.1 a		1430		
EM3-4-2.2-28-100-B14	755.00			4.6 a				
EM3-4-3-28-100-B14	830.00	3.0 kW		6.3 a		1440	100	28 mm
EM3-4-4-28-112-B14	1030.00	4.0 kW		8.2 a				

NEW BP13 Vivoil Pumps

Part Number	List Price \$	cc	Rated Pressure	Max / Min Speed
7P1644003	510.00	0.9	240 bar	700/6000 rpm
7P1744002	510.00	1.2	250 bar	
7P1844003	510.00	1.7		
7P2044002	510.00	2.2		
7P2144001	510.00	2.6		
7P2344002	510.00	3.2		
7P2544001	510.00	3.8		
7P2744001	510.00	4.3		
7P2944001	530.00	4.9		
7P3144002	530.00	5.9		
7P3244001	530.00	6.5		700/5000 rpm
7P3444003	530.00	7.8		
7P3644001	530.00	9.8	181 bar	700/4000 rpm

Part #	Motor & Voltage	Valve	Valve Type	Suction	Pump CC	Tank	Special
	16DA	131	Z	H	21	2A	V

MOTOR	DESCRIPTION
03DA	350W/12VDC 1700rpm
03DB	350W/24VDC 1800rpm
08DA	800W/12VDC 3200rpm
08DB	800W/24VDC 3200rpm
16DA	1.6KW/12VDC 2600rpm
16DB	1.6KW/24VDC 2700rpm
25DA	2.5KW/12VDC 2400rpm
25DB	2.5KW/24VDC 3400rpm
30DA	3.0KW/12VDC 1850rpm
40DB	4.0KW/24VDC 2700rpm
15AA	1.1KW/415VAC 2800rpm
30AA	2.2KW/415VAC 2800rpm
40AC	3.0KW/415VAC 2800rpm
50AC	4.0KW/415VAC 2800rpm
60PE	6.0HP Petrol Electric start 3000rpm
60DE	6.7HP Diesel Electric start 2800rpm
Technical information - see page 28-30	

VALVE	DESCRIPTION
010	P & T
030	Single Acting
03M	Single Acting with override
131	1 x Double Acting (Cetop)
132	2 x Double Acting (Cetop)
132SW	2 x Double Acting (Sandwich)
133SW	3 x Double Acting (Sandwich)
134SW	4 x Double Acting (Sandwich)
135SW	5 x Double Acting (Sandwich)
136SW	6 x Double Acting (Sandwich)
Technical information - see pages 75-87	

VALVE TYPE	DESCRIPTION
Z	Closed Centre
C	Tandem Centre
H	Motor Spool
Y	A & B to T
S	Crossover S/A
U	Open Centre

SUCTION	DESCRIPTION
H	Horizontal Mount
V	Vertical Mount

PUMP	DESCRIPTION
037	0.37 cc
075	0.75 cc
08	0.8 cc
11	1.1 cc
16	1.6 cc
21	2.1 cc
27	2.7 cc
32	3.2 cc
37	3.7 cc
42	4.2 cc
48	4.8 cc
58	5.8 cc
70	7.0 cc
80	8.0 cc
Technical information - see page 30-31	

TANK	DESCRIPTION
1S	MS1AB 1L useable
2S	MS2AB 1.4L useable
4S	MS4AB 2.4L useable
0B	MT0AB 2.5L
0P	RP0AB 3.0L
0A	LS0AB 3.0L
6S	MS6AB 3.3L
1A	LS1AB 3.8L
2A	LS2AB 5.7L
2B	MT2AB 7.5L
3B	MT3AB 10L
4B	MT4AB 12L
5B	MT5AB 15L
8B	MT18AB 18L (for petrol/diesel)
1K	OTK012 21L (for petrol/diesel)
4H	HR4ABC 22L
5H	HR5ABC 30L
6H	HR6ABC 38L
MP	No Tank
MPR	No Tank No Relief
Technical information - see page 33	

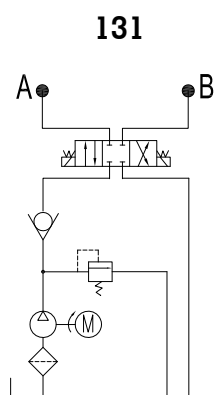
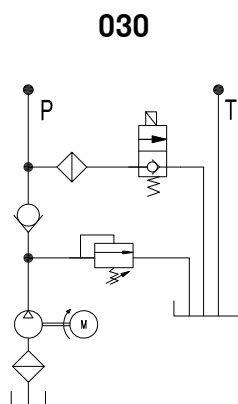
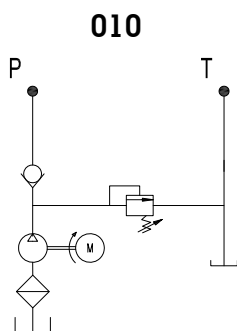
SPECIAL	DESCRIPTION
MPR	Motor Pump with Relief Valve
MP	Motor Pump
SW	Sandwich Valve
V	Vivoil Pump
SWHP	Sandwich Valve Handpump
SWM	Sandwich Valve Manual Override
COV	CETOP Override
V	Vivoil Pump
Multiple special options separated by /	

Micro Power Unit - Max Pressure 3000 psi

Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
03DA010H0381S	1082.00	350 w	12v	P + T	0.38 cc	9/16” UNO	1.4 L	2500 psi
03DB010H0381S	1082.00		24v					
03DA030H0381S	1133.00		12v	S/A				
03DB030H0381S	1133.00		24v					
03DA131ZH0382S	1391.00		12v	D/A				
03DB131ZH0382S	1391.00		24v					

Micro Power Unit - Max Pressure 3000 psi

Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
08DA010H0751S	1133.00	800 w	12v	P + T	0.75 cc	9/16" UNO	1.4 L	2500 psi
08DB010H0751S	1133.00		24v					
08DA030H0751S	1185.00		12v	S/A				
08DB030H0751S	1185.00		24v					
08DA131ZH0752S	1391.00		12v	D/A				
08DB131ZH0752S	1391.00		24v					



Intermittent use only

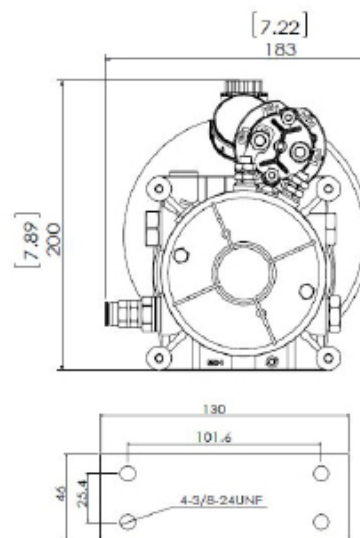
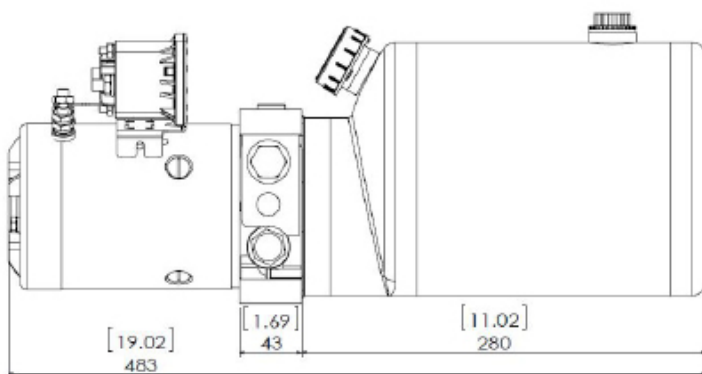
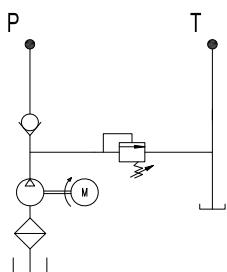
HYDRAULIC POWER UNITS

DC Power Units

P & T Power Unit - Max Pressure 3000 psi

Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
16DA010H211A	1082.00	1.6 kW	12v	P + T ports only	2.1 cc	9/16” UNO	3.8 L	2500 psi
16DA010H212A	1082.00						5.7 L	
16DA010H212B	1133.00						7.5 L	
16DA010H213B	1133.00						10 L	
16DB010H211A	1082.00	2.2 kW	24v				3.8 L	
16DB010H212A	1082.00						5.7 L	
16DB010H212B	1133.00						7.5 L	
16DB010H213B	1133.00						10 L	

Other tank sizes available
See page 33



Intermittent use only

Overall Dimensions					
Tank Size	3.8 L	5.7 L	7.5 L	10 L	15 L
Length	483mm	553mm	483mm	540mm	713mm
Width	183mm				
Height	200mm				

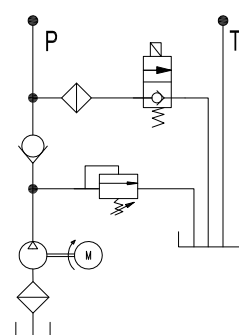
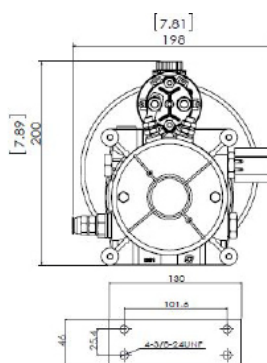
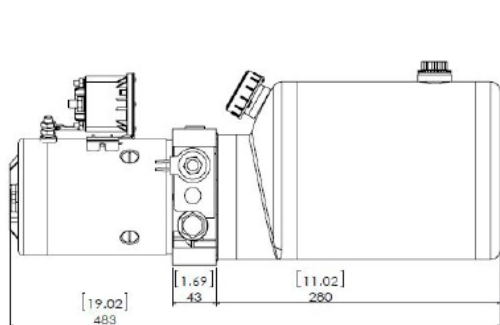
Single Acting Power Unit - Max Pressure 3000 psi

Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
16DA030H211A	1133.00	1.6 kW	12v	Single acting	2.1 cc	9/16" UNO	3.8 L	2500 psi
16DA030H212A	1133.00						5.7 L	
16DA030H212B	1185.00						7.5 L	
16DA030H213B	1185.00						10 L	
16DB030H211A	1133.00	2.2 kW	24v				3.8 L	
16DB030H212A	1133.00						5.7 L	
16DB030H212B	1185.00						7.5 L	
16DB030H213B	1185.00						10 L	



Other tank sizes available
See page 33

Flow control cartridge can
be fitted to centre block



Overall Dimensions					
Tank Size	3.8 L	5.7 L	7.5 L	10 L	15 L
Length	483mm	553mm	483mm	540mm	713mm
Width	198mm				
Height	200mm				

Intermittent use only

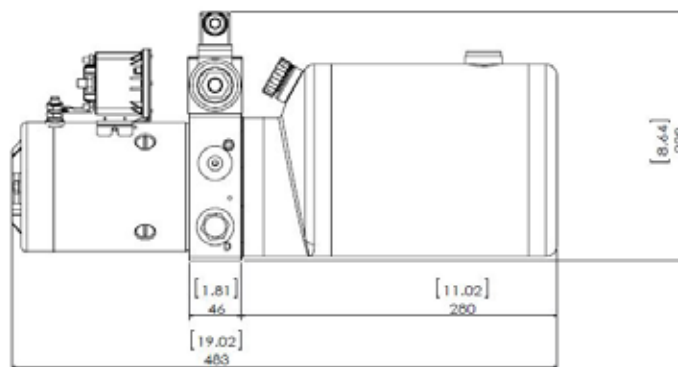
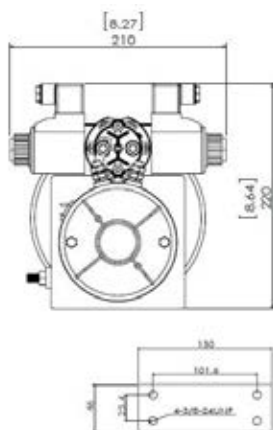
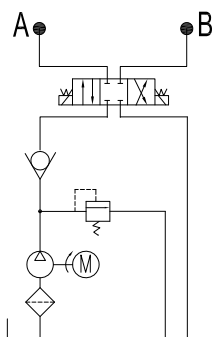
HYDRAULIC POWER UNITS

DC Power Units

Double Acting Power Unit - Max Pressure 3000 psi

Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
16DA131ZH211A	1236.00	1.6 kW	12v	D/A	2.1 cc	9/16" UNO	3.8 L	2500 psi
16DA131ZH212A	1236.00						5.7 L	
16DA131ZH212B	1288.00						7.5 L	
16DA131ZH213B	1288.00						10 L	
16DB131ZH211A	1236.00	2.2 kW	24v				3.8 L	
16DB131ZH212A	1236.00						5.7 L	
16DB131ZH212B	1288.00						7.5 L	
16DB131ZH213B	1288.00						10 L	

Other tank sizes available
See page 33



Intermittent use only

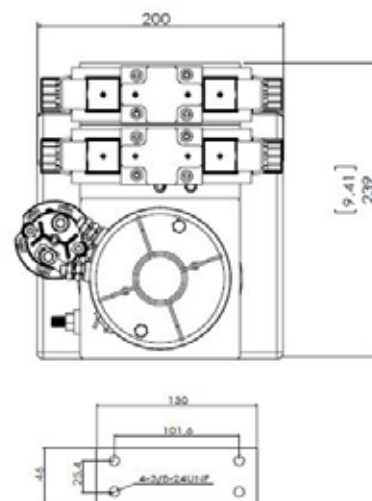
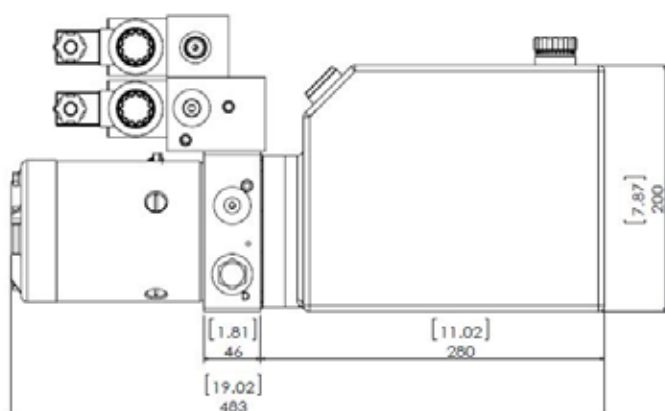
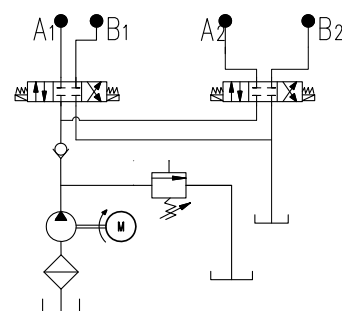
Overall Dimensions					
Tank Size	3.8 L	5.7 L	7.5 L	10 L	15 L
Length	483mm	553mm	483mm	540mm	713mm
Width	210mm				
Height	220mm				

2 x Double Acting Power Unit - Max Pressure 3000 psi

Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
16DA132ZH212B	1700.00	1.6 kW	12v	2 x D/A	2.1 cc	9/16" UNO	7.5 L	2500 psi
16DB132ZH212B	1700.00	2.2 kW	24v					



Other tank sizes available
See page 33



Tank Size	Overall Dimensions				
	3.8 L	5.7 L	7.5 L	10 L	15 L
Length	483mm	553mm	483mm	540mm	713mm
Width	200mm				
Height	239mm				

Intermittent use only

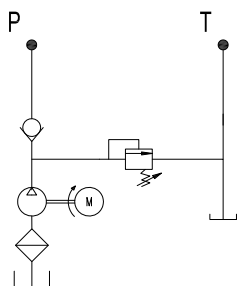
HYDRAULIC POWER UNITS

DC Power Units

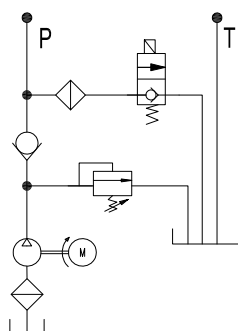
High Power 2.5kW Unit - Max Pressure 3000 psi

Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
25DA010H321A	1391.00	2.5 kW	12v	P + T	3.2 cc	9/16" UNO	3.8 L	3000 psi
25DA030H321A	1494.00			S/A				
25DA131ZH321A	1545.00			D/A				
25DB010H321A	1391.00	2.8 kW	24v	P + T				
25DB030H321A	1494.00			S/A				
25DB131ZH321A	1545.00			D/A				

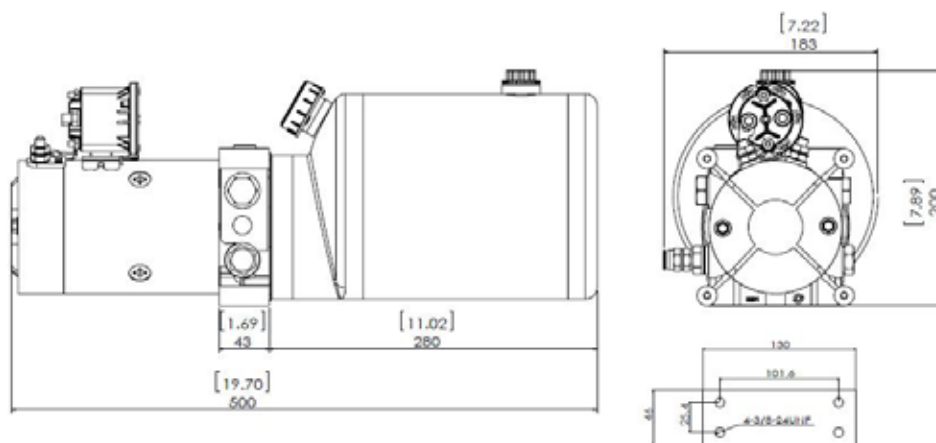
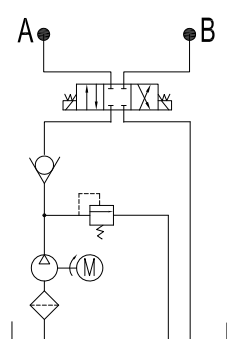
010



030



131



Intermittent use only

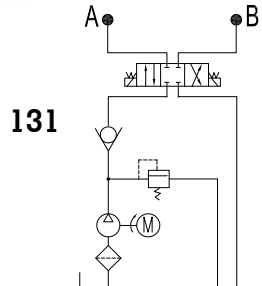
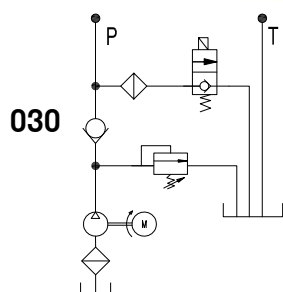
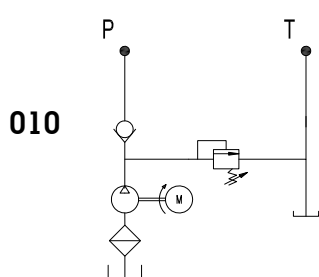
Dimension (mm)	DA010H	DB010H	DA030H	DB030H	DA131H	DB131H
Length	492	527	492	527	492	527
Width	183	183	198	198	210	210
Height	200	200	200	200	220	220

High Power 3kW Unit - Max Pressure 3000 psi

Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
30DA010H373B	2215.00	3.0 kW	12v	P + T	3.7 cc	9/16" UNO	10 L	2500 psi
30DA030H373B	2318.00			S/A				
30DA131ZH373B	2369.00			D/A				



Dimension	010	030	131
Length	622mm	622mm	644mm
Width	200mm	200mm	224mm
Height	231mm	231mm	210mm



500 amp heavy duty start solenoid

Intermittent use only

High Power 4kW Unit - Max Pressure 3000 psi

Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
40DB010H423B	2369.00	4.0 kW	24v	P + T	4.2 cc	9/16" UNO	10 L	2500 psi
40DB030H423B	2472.00			S/A				
40DB131ZH423B	2575.00			D/A				



Dimension	010	030	131
Length	678mm	678mm	678mm
Width	200mm	200mm	210mm
Height	232mm	232mm	239mm

Hi-powered & cooled for longer run times

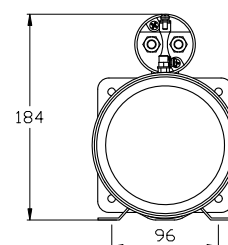
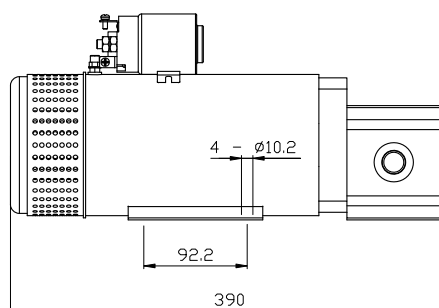
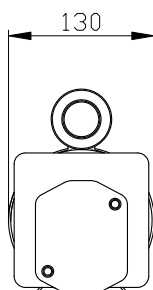
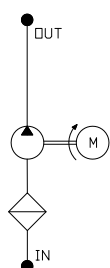
Intermittent use only

HYDRAULIC POWER UNITS

DC Power Units

High Power 4kW Unit - Max Pressure 3000 psi

Part Number	List Price \$	Power	Volts	Pump	Ports	Function
MPA025	2369.00	4.0 kW	24v	4.2 cc	3/8" BSPP	MP Unit

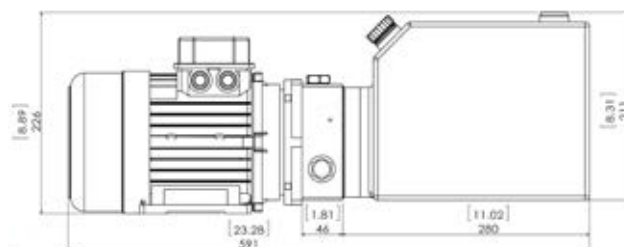
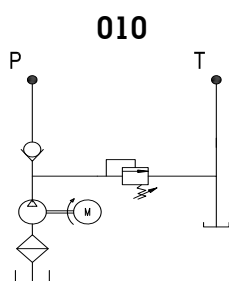


Intermittent use only

1.1kW Power Unit

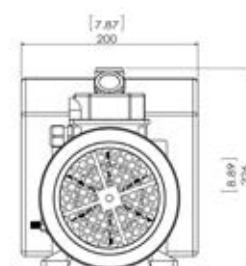
Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
15AA010H112B	1494.00	1.1 kW	240v	P + T	1.1 cc	9/16" UNO	7.5 L	2500 psi
15AA131CH112B	1648.00		Coils 24v DC	D/A				

Dimension	010	131
Length	590mm	590mm
Width	200mm	224mm
Height	238mm	245mm



All AC units supplied with standard 24v DC coils unless specified

Intermittent use only

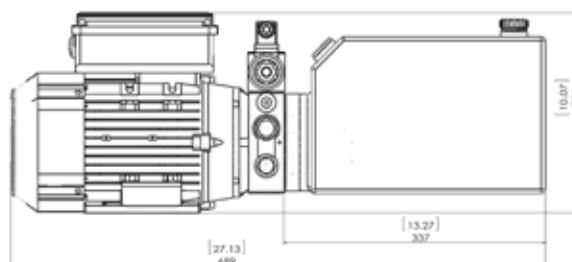
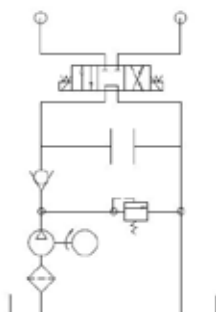


2.2kW Power Unit

Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
30AA010H213B	1803.00	2.2 kW	240v	P + T	2.1 cc	9/16" UNO	10 L	2500 psi
30AA131CH213B	1957.00		Coils 24v DC	D/A				

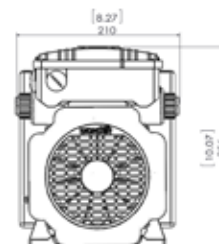
Dimension	010	131
Length	689mm	689mm
Width	200mm	210mm
Height	256mm	256mm

131



All AC units supplied with standard 24v DC coils unless specified

Intermittent use only



HYDRAULIC POWER UNITS

AC Power Units - 415v

1.1kW Power Unit

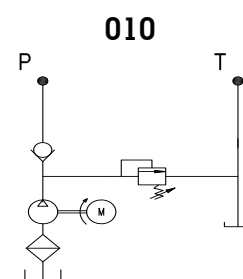
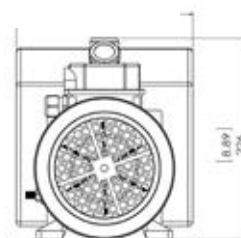
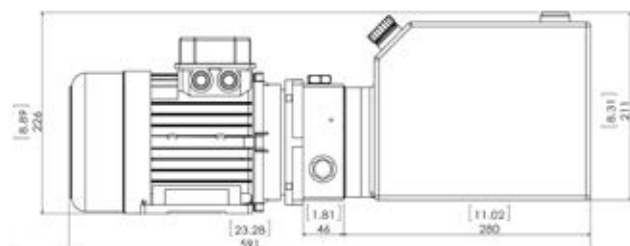
Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
15AC010H112B	1391.00	1.1 kW	415v	P + T	1.1 cc	9/16" UNO	7.5 L	2500 psi
15AC131CH112B	1545.00		Coils 24v DC	D/A				

All AC units supplied with standard 24v DC coils unless specified

Intermittent use only



Dimension	010	131
Length	591mm	591mm
Width	200mm	210mm
Height	226mm	245mm



2.2kW Power Unit

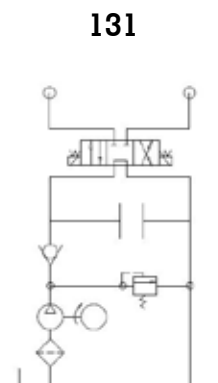
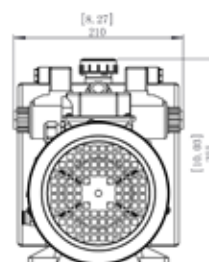
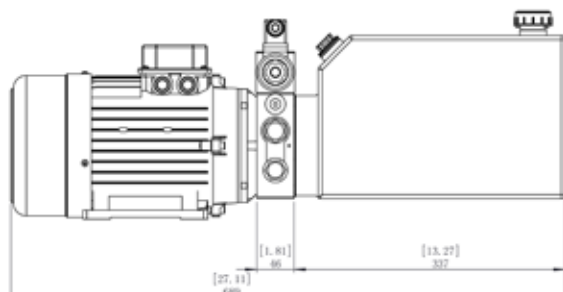
Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
30AC010H213B	1854.00	2.2 kW	415v	P + T	2.1 cc	9/16" UNO	10 L	2500 psi
30AC131CH213B	1957.00		Coils 24v DC	D/A				

All AC units supplied with standard 24v DC coils unless specified

Intermittent use only



Dimension	010	131
Length	689mm	689mm
Width	200mm	210mm
Height	255mm	255mm



3.0kW Power Unit

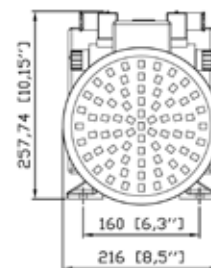
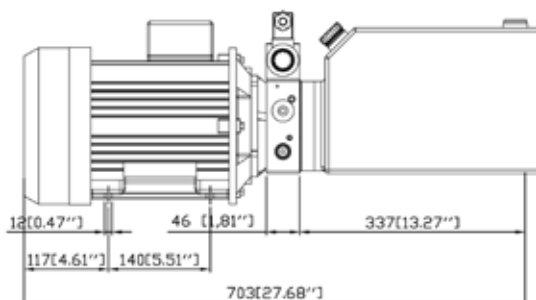
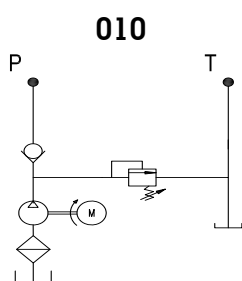
Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
40AC010H273B	1854.00	3 kW	415v	P + T	2.7 cc	9/16" UNO	10 L	2500 psi
40AC131CH273B	2009.00		Coils 24v DC	D/A				

Dimension	010	131
Length	703mm	703mm
Width	200mm	216mm
Height	280mm	258mm



All AC units supplied with standard 24v DC coils unless specified

Intermittent use only



4.0kW Power Unit

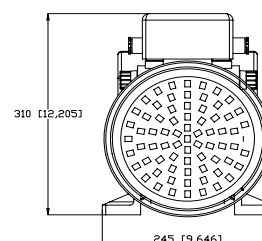
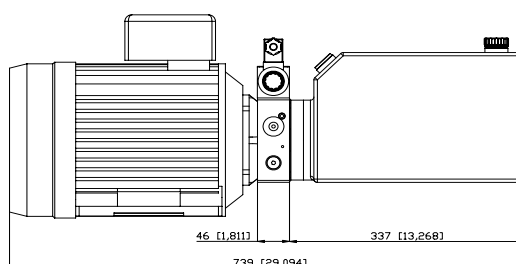
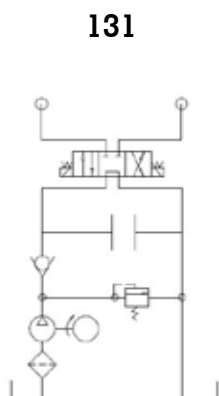
Part Number	List Price \$	Power	Volts	Function	Pump	Ports	Tank Usable	Relief Set
50AC010H373B	2009.00	4 kW	415v	P + T	3.7 cc	9/16" UNO	10 L	2500 psi
50AC131CH373B	2163.00		Coils 24v DC	D/A				

Dimension	010	131
Length	739mm	739mm
Width	200mm	210mm
Height	264mm	263mm



All AC units supplied with standard 24v DC coils unless specified

Intermittent use only

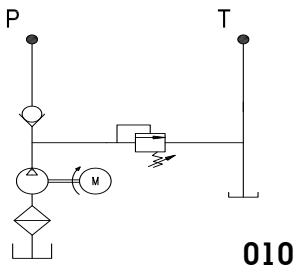


HYDRAULIC POWER UNITS

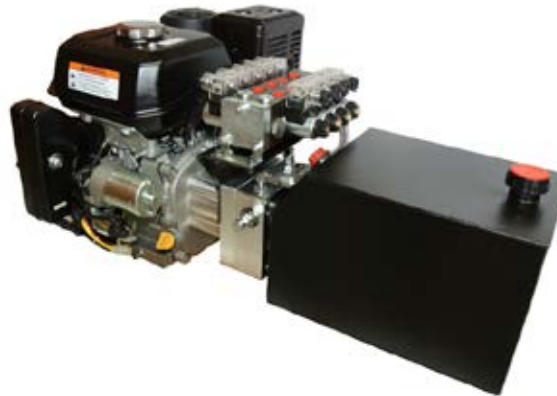
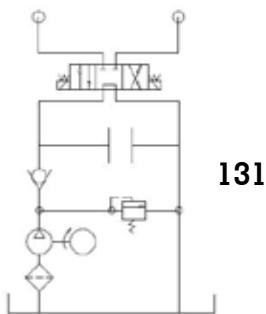
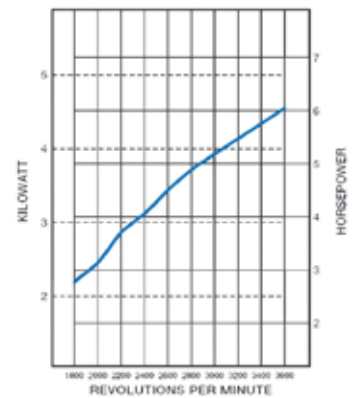
Engine Power Units

6HP Engine Power Unit

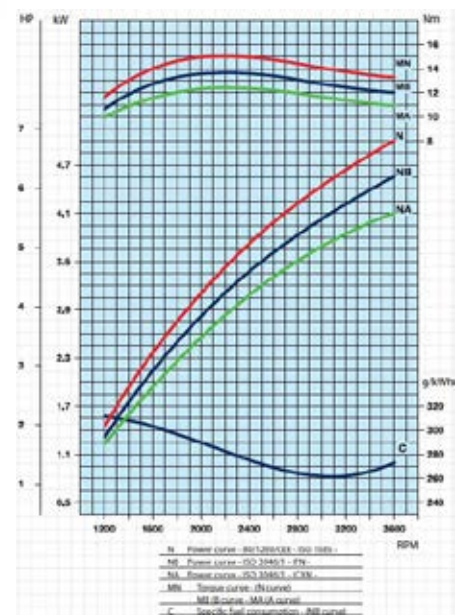
Part Number	List Price \$	Power	Fuel	Function	Pump	Tank Usable	Relief Set			
60PE010H278B	3451.00	6 hp	Unleaded	P + T	2.7 cc	18 L	2500 psi			
60PE131CH278K	3832.00			D/A						
60DE010H278B	7400.00	6.7 hp	Diesel	P + T						
60DE131CH278K	7847.00			D/A						
GEU01-001	2318.00	Power unit kit for DIY engine (P + T)								
GEU13-001	2524.00	Power unit kit for DIY engine (with Cetop)								



Net power (petrol)



Torque Curves (diesel)



Continuous duty

Tank & pump changeable with others in range

Multiple valve additions available

Larger motor pump units available



DC Motors

Part Number	List Price \$	Power	Voltage	Rated Current	IP	Rated Speed	Duty Cycle	
							S2	S3
235A-FS-A	366.00	350 w	12v	40a	54	1700	2 min	3%
235B-FS-A	366.00		24v	25a		1800		
308AS-2-A	402.00	800 w	12v	105a		3200		
308BS-2-A	402.00		24v	50a				
416A-2	536.00	1.6 kW	12v	190a		2600	2 min	8%
422B-2	536.00	2.2 kW	24v	120a		2700		
425A-2	608.00	2.5 kW	12v	280a		2400		
428B-2	721.00	2.8 kW	24v	150a		3400		
530A-F	1288.00	3.0 kW	12v	450a		1850	5 min	9%
540B-2-J	1524.00	4.0 kW	24v	215a		2700	8 min	15%



Start Solenoids

Part Number	List Price \$	Rated Amp	Voltage	Duty Max	Power Unit
SR3A2	144.00	250a	12v	6 minutes	1.6, 2.5, 4.0 kW DC 12v
SR3B2	144.00		24v		1.6, 2.5, 4.0 kW DC 24v
SR5A2	258.00	400a	12v		3.0 kW DC 12v



HYDRAULIC POWER UNITS

Power Unit Parts & Accessories

AC Motors

Part Number	List Price \$	Power	Voltage	Amp Draw	IP	Speed	Frame
E11S-2-80-B34	783.00	1.1 kW	220/240v	6.7a	54	2800	80
E22S-2-90L-B34	783.00	2.2 kW		9.7a			90
E11T-2-80-B34	567.00	1.1 kW	380/415v	2.49a			80
E22T-2-90L-B34	685.00	2.2 kW		4.67a			90
E30T-2-100L-B34	1082.00	3.0 kW		6.22a			100
E40T-2-112M-B34	1380.00	4.0 kW		10.5a			112

240v



415v



Premium Gear Pumps ("Little Kuma")

Premium gear pumps, made in Italy by Vivoil



Part Number	List Price \$	CC	Maximum Pressure	Min Speed	Max Speed
B1P1643HZZB	294.00	0.91	240 bar	700 rpm	4000 rpm
B1P1743HZZB	294.00	1.17	250 bar		
B1P1843HZZB	252.00	1.56			
B1P2043HZZB	252.00	2.08			
B1P2143HZZB	252.00	2.60			
B1P2343HZZB	252.00	3.12	220 bar		
B1P2543HZZB	252.00	3.64			
B1P2743HZZB	252.00	4.16	200 bar		
B1P3143HZZB	252.00	5.85	170 bar		3500 rpm
B1P3443HZZB	252.00	7.80	110 bar		

For power unit premium gear pump change add to list price:
\$85 (0.91cc - 1.17cc) or
\$125 (1.56cc - 7.8cc)



Standard Gear Pumps - pressure balanced for intermittent duty (electric)

Part Number	List Price \$	CC	Rated Pressure	Max/Min Speed
G110	216.00	1.1	210 bar	6000/600 rpm
G160	216.00	1.6		
G210	216.00	2.1		
G270	216.00	2.7		
G320	216.00	3.2	190 bar	5000/600 rpm
G370	216.00	3.7		4500/600 rpm
G420	216.00	4.2		4000/600 rpm
G480	216.00	4.8	170 bar	3500/600 rpm
G580	216.00	5.8		3000/600 rpm
G800	216.00	8.0	110 bar	2100/600 rpm

Standard Gear Pumps - pressure balanced for continuous duty (with keyed shaft)

Part Number	List Price \$	CC	Rated Pressure	Max/Min Speed
G110S-S1	330.00	1.1	210 bar	6000/600 rpm
G210S-S1	330.00	2.1		
G270S-S1	330.00	2.7		
G380S-S1	330.00	3.8	190 bar	4500/600 rpm
G420S-S1	330.00	4.2		4000/600 rpm
G480S-S1	330.00	4.8	170 bar	3500/600 rpm
G580S-S1	330.00	5.8		3000/600 rpm
G800S-S1	330.00	8.0	110 bar	2100/600 rpm



For power unit standard gear pump change, add \$50 to list price

HYDRAULIC POWER UNITS

Power Unit Parts & Accessories

Power Unit Mount

Part Number	List Price \$	Description
PUMT	41.00	Suits all power units with 130mm centre manifold



Tank Breather

Part Number	List Price \$	Description
TKBR	21.00	Tank Breather 3/4" NPT



Tank Port Plug

Part Number	List Price \$	Description
TKBP	10.00	Tank Plug 3/4" NPT



Power Unit Flange

Part Number	List Price \$	Description
FLST120	41.00	Weld flange for power unit mount



Power Unit Dust Cover

Part Number	List Price \$	Description
DMC01	41.00	DC power unit dust cover



Solenoids

Part Number	List Price \$	Voltage	Amp Draw	Core Size	Length	Connector
S2D12-08	43.00	12v DC	1.5a	13.3mm	37.5mm	2 wire
S2D24-08	43.00	24v DC	0.75a			
D1D12-08	57.00	12v DC	1.5a			3 pin DIN plug
D1D24-08	57.00	24v DC	0.75a			
D1A220-08	57.00	220v AC	0.08a			



Tanks - MS Series - Steel

Part Number	List Price \$	Usable Litres	Length	Cylinder Diameter
MS1AB	113.00	1 L	160mm	122mm
MS2AB	118.00	1.4 L	200mm	
MS4AB	129.00	2.4 L	300mm	
MS6AB	134.00	3.3 L	400mm	

**Tanks - LS Series - Steel**

Part Number	List Price \$	Usable Litres	Length	Cylinder Diameter
LS0AB	103.00	3.0 L	240mm	177mm
LS1AB	124.00	3.8 L	280mm	
LS2AB	129.00	5.7 L	350mm	

**Tanks - MT Series - Steel**

Part Number	List Price \$	Usable Litres	Length	Width	Height
MT0AB	129.00	2.5 L	160mm	140mm	220mm
MT2AB	149.00	7.5 L	280mm	200mm	200mm
MT3AB	155.00	10 L	335mm		
MT4AB	160.00	12 L	395mm		
MT5AB	175.00	15 L	510mm		
MT6AB	216.00	19 L	625mm	280mm	300mm
MT18AB	330.00	18 L	300mm		

**Tanks - HR Series - Steel**

Part Number	List Price \$	Usable Litres	Length	Width	Height
HR4ABC	216.00	22 L	380mm	250mm	300mm
HR5ABC	263.00	30 L	500mm		
HR6ABC	304.00	38 L	600mm		

**Tanks - RP Series - Poly**

Part Number	List Price \$	Usable Litres	Length	Width	Height
RPOAB	72.00	2.3 L	198mm	173mm	173mm
RP2AB	77.00	6 L	332mm		



HYDRAULIC POWER UNITS

Power Unit Controllers

Pendant Controller Single Acting

Part Number	List Price \$	Buttons	Function	Cord	IP Rating	Voltage	Connector	E-Stop
KCB21-03	82.00	2	Single Acting	3 mtr	55	5v - 48v	No	No

Note: Multi-funtion pendants can be converted to single-acting on request

Pendant Controller Double Acting

Part Number	List Price \$	Buttons	Function	Cord	IP Rating	Voltage	Connector	E-Stop
KCB22-03	93.00	2	Double Acting	3 mtr	55	5v - 48v	No	No
KCB22-10	124.00			10 mtr				
KCB42-05	155.00	4		5 mtr				
KCB62-05	227.00	6						

Pendant Controller with E-Stop

Part Number	List Price \$	Buttons	Function	Cord	IP Rating	Voltage	Connector	E-Stop
KCB32E-05	144.00	2	Double Acting	5 mtr	55	5v - 48v	No	Yes
KCB52E-05	196.00	4						
KCB72E-05	268.00	6						

Pendant Controller Quick Connect

Part Number	List Price \$	Buttons	Function	Cord	IP Rating	Voltage	Connector	E-Stop
KCB21C-03	134.00	2	Single Acting	3 mtr	55	5v - 48v	Yes	No
KCB22C-03C	155.00		Double Acting					



All pendant controllers
for low-voltage use only

Pendant Holsters

Part Number	List Price \$	Description
KCB-BK	31.00	For use with all KCB pendants



NEW Wireless Pendant Controllers

Part Number	List Price \$	Switch	Available Ouputs	Available Relays	Voltage	Transmitter Power Supply	Transmitter Size	Receiver Size
HN-A3100	1980.00	Single step	8	10	9-36v DC	3 x AAA batteries	180x65x50 mm	260x280x80 mm
HN-13100AB	1980.00		14					
HN-A4100	2220.00		10	15				
HN-4100AB	2220.00		18					
HN-A4200	2340.00	Two Step	20	20				
HN-A4200AB	2340.00		40					

- A & B function allows switching transmitter from one bank of relays to another utilising the same buttons
- LED indicator shows which system is in use
- Frequency 915.00 > 928.00 MHz
- Wiring harness as standard
- Plug and play wiring looms available on request (additional cost applies)

Controllers can be programmed at Hydraulics Network to achieve different requirements.

**NEW** Replacement Transmitters

Part Number	List Price \$	Switch	Transmitter Power Supply	Transmitter Size
HN-TA3100	990.00	Single Step	3 x AAA batteries	180x65x50 mm
HN-TA4100	1110.00			220x65x50 mm
HN-TA4200	1170.00	Two Step		

NEW Replacement Parts

Part Number	List Price \$	Description
HN-EMGSTP	150.00	Emergency stop Replacement
HN-IKEY	120.00	Transmitter IKEY Replacement

We highly recommend that all wireless remotes be fitted with an isolation switch

HYDRAULIC POWER UNITS

Power Unit Controllers & DIN Plugs

Wireless Pendant Controllers

Part Number	List Price \$	Voltage	Description
V6PR-4	1689.00	12v or 24v compatible	Remote control set with override pad on receiver 4 button transmitter
V6PR-6	1689.00		Remote control set with override pad on receiver 6 button transmitter
V6HS-4	494.00		4 button replacement transmitter
V6HS-6	494.00		6 button replacement transmitter

- Wiring harness as standard
- Plug and play wiring looms available on request (additional cost applies)

Controllers can be programmed at Hydraulics Network to achieve different requirements.



DIN Plugs

Part Number	List Price \$	Description	DIN Size	Terminals	Body	LED
DP-IP65-AC/DC-IND	16.00	1-250V AC+DC, IP65	Industrial	3	Black	Yes
DP-IP67-AC/DC-250	16.00	1-250V AC+DC, IP67	DIN 43650-A (ISO 4400)			
DP-IP67-AC/DC-38	16.00	1-38V AC+DC, IP67				
DP-IP67-AC/DC-3M	33.00	1-38V AC+DC, 3m Cable, IP67				
DP-LED-AC	10.00	AC			Clear	
DP-LED-DC	10.00	DC				
DP-REC-LV	27.00	Rectifier AC to DC (1-48v)				
DP-REC	27.00	Rectifier AC to DC (70-250v)	Black		No	
YLMB8ESN002	21.00	4 pin				

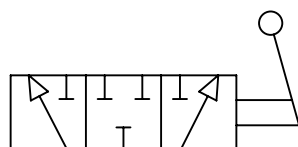


Manual Diverter Valves 3 Port		38
Manual Diverter Valves 6 Port		38
Manual Diverter Valves 4 Port		39
Manual Diverter Valves 8 Port		39
Replacement Handles		39
Solenoid Diverter Valves 3 Port		40
Solenoid Diverter Valves 6 Port		40
Ball Valves 2 Port		41
Ball Valves 3 Port		41
Replacement Handles		41
Locking Devices		42
Hand Pumps		43
Hand Pump Tanks & Accessories		47

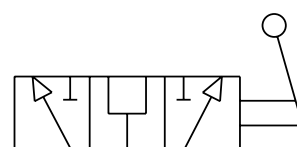
PREMIUM ITALIAN PRODUCT 

Manual Diverter Valves 3 Port

Part Number	List Price \$	Ports	Max Pressure	Max Flow	Spool Crossover
DDF3380A	88.00	3/8" BSPP	350 bar	60 lpm	Open Centre
DDF3120A	113.00	1/2" BSPP		90 lpm	
DDF3340A	129.00	3/4" BSPP		120 lpm	
DDF3100A	180.00	1" BSPP	300 bar	200 lpm	Closed Centre
DDF3380B	93.00	3/8" BSPP	350 bar	60 lpm	
DDF3120B	124.00	1/2" BSPP		90 lpm	
DDF3340B	134.00	3/4" BSPP		120 lpm	
DDF3100B	185.00	1" BSPP	300 bar	200 lpm	



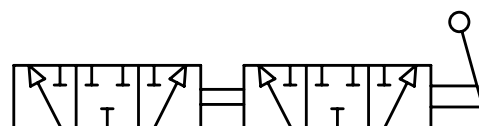
B



A

Manual Diverter Valves 6 Port

Part Number	List Price \$	Ports	Max Pressure	Max Flow	Spool Crossover
DDF6380A	185.00	3/8" BSPP	350 bar	60 lpm	Open Centre
DDF6120A	242.00	1/2" BSPP		90 lpm	
DDF6340A	263.00	3/4" BSPP		120 lpm	
DDF6100A	386.00	1" BSPP	300 bar	200 lpm	Closed Centre
DDF6380B	201.00	3/8" BSPP	350 bar	60 lpm	
DDF6120B	258.00	1/2" BSPP		90 lpm	
DDF6340B	278.00	3/4" BSPP		120 lpm	
DDF6100B	402.00	1" BSPP	300 bar	200 lpm	



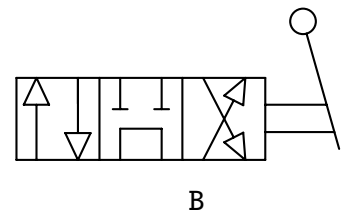
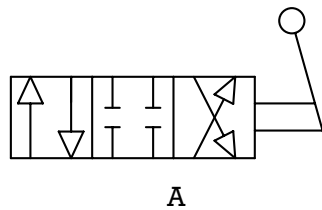
B



A

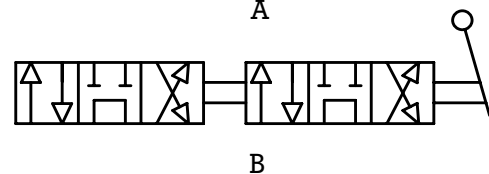
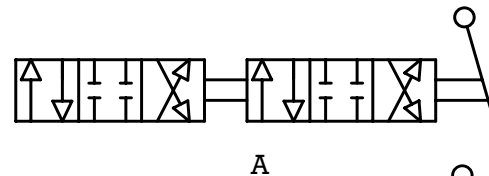
Manual Diverter Valves 4 Port

Part Number	List Price \$	Ports	Max Pressure	Max Flow	Spool Crossover
IDF4380A	139.00	3/8" BSPP	350 bar	60 lpm	Closed Centre
IDF4120A	144.00	1/2" BSPP		90 lpm	
IDF4340A	206.00	3/4" BSPP		120 lpm	
IDF4100A	221.00	1" BSPP	300 bar	200 lpm	Open Centre
IDF4380B	134.00	3/8" BSPP	350 bar	60 lpm	
IDF4120B	139.00	1/2" BSPP		90 lpm	
IDF4340B	201.00	3/4" BSPP		120 lpm	
IDF4100B	216.00	1" BSPP	300 bar	200 lpm	



Manual Diverter Valves 8 Port

Part Number	List Price \$	Ports	Max Pressure	Max Flow	Spool Crossover
IDF8380A	288.00	3/8" BSPP	350 bar	60 lpm	Closed Centre
IDF8120A	304.00	1/2" BSPP		90 lpm	
IDF8340A	427.00	3/4" BSPP		120 lpm	
IDF8100A	469.00	1" BSPP	300 bar	200 lpm	Open Centre
IDF8380B	278.00	3/8" BSPP	350 bar	60 lpm	
IDF8120B	288.00	1/2" BSPP		90 lpm	
IDF8340B	412.00	3/4" BSPP		120 lpm	
IDF8100B	453.00	1" BSPP	300 bar	200 lpm	



Replacement Handles

Part Number	List Price \$	To Fit	Port Size
12000149	9.00	DDF/IDF	1/4", 3/8", 1/2"
12000030	10.00		3/4", 1"

HAND PUMPS, DIVERTER & BALL VALVES

Diverter Valves

Solenoid Diverter Valves 3 Port

Part Number	List Price \$	Ports	Max Pressure	Max Flow	Spool Crossover	
HVC-10-12VDC	330.00	1/2" BSPP	210 bar	80 lpm	Open	
HVC-10-24VDC						

Solenoid Diverter Valves 6 Port (drain must be fitted above 150 bar when indicated)

Part Number	List Price \$	Ports	Max Press	Max Flow	Bankable	Spool Crossover	
MOP-06-12VDC	402.00	3/8" BSPP	250 bar	50 lpm	Yes	Closed	
MOP-06-24VDC		Drain 1/4" BSPP					

Part Number	List Price \$	Ports	Max Press	Max Flow	Bankable	Spool Crossover	
ZVH-06-12VDC	433.00	3/8" BSPP	210 bar	50 lpm	No	Open	
ZVH-06-24VDC							

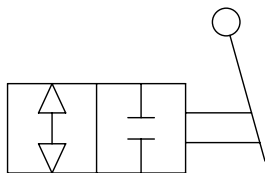
Part Number	List Price \$	Ports	Max Press	Max Flow	Bankable	Spool Crossover	
SCS4-1S-1Y-1G4-12VDC	510.00	1/2" BSPP	315 bar	80 lpm	Yes	Closed	
SCS4-1S-1Y-2G4-24VDC		Drain 1/4" BSPP					

Part Number	List Price \$	Ports	Max Press	Max Flow	Bankable	Spool Crossover	
SVK-10-12VDC	536.00	3/4" BSPP	250 bar	80 lpm	Yes	Closed	
SVK-10-24VDC		Drain 1/4" BSPP					

Part Number	List Price \$	Ports	Max Press	Max Flow	Bankable	Spool Crossover	
KVH6-MB-G1/2	422.00	1/2" BSPP	250 bar	50 lpm	No	Closed	

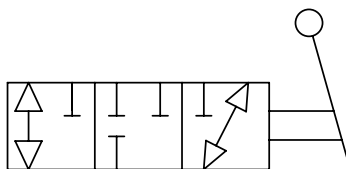
Ball Valves 2 Port

Part Number	List Price \$	Ports	Max Pressure	Max Flow	Material
RAS2140P	62.00	1/4" BSPP	500 bar	25 lpm	Steel
RAS2380P	67.00	3/8" BSPP		35 lpm	
RAS2120P	82.00	1/2" BSPP		60 lpm	
RAS2340P	134.00	3/4" BSPP	400 bar	100 lpm	
RAS2100P	165.00	1" BSPP	350 bar	150 lpm	
RAS2114P	175.00	1.1/4" BSPP			
RAS2112P	196.00	1.1/2" BSPP			



Ball Valves 3 Port (L port design)

Part Number	List Price \$	Ports	Max Pressure	Max Flow	Material
RAS3140P	124.00	1/4" BSPP	400 bar	25 lpm	Steel
RAS3380P	134.00	3/8" BSPP		35 lpm	
RAS3120P	144.00	1/2" BSPP	350 bar	60 lpm	
RAS3340P	227.00	3/4" BSPP		100 lpm	
RAS3100P	268.00	1" BSPP		150 lpm	
RAS3114P	288.00	1.1/4" BSPP			
RAS3112P	330.00	1.1/2" BSPP			



Replacement Handles

Part Number	List Price \$	To Fit	Port Size
89800001	42.00	RAS2/RAS3	1/4", 3/8", 1/2"
89800002	74.00		3/4", 1", 1.1/4", 1.1/2"

Locking Devices

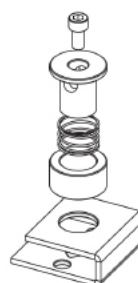
Part Number	List Price \$	To Fit	Port Size	Material
LK6-F	62.00	RAS2/RAS3 Ball Valves	1/4", 3/8", 1/2"	Steel
LK20-F	93.00		3/4", 1", 1.1/4", 1.1/2"	



Padlock not included

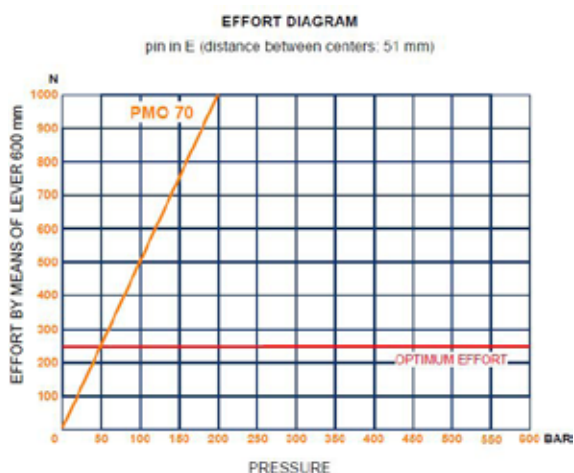
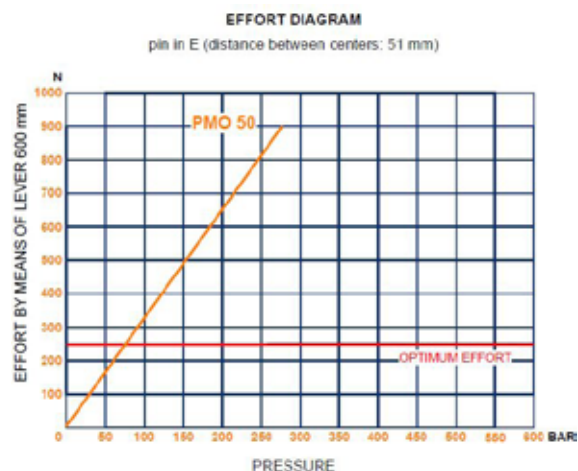


Part Number	List Price \$	To Fit	Port Size	Material
SB6	98.00	RAS2/RAS3 Ball Valves	1/4", 3/8", 1/2"	Steel
SB20	160.00		3/4", 1", 1.1/4", 1.1/2"	



Single Acting Hand Pumps with Relief - Remote Mounting

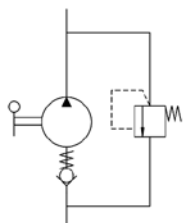
Part Number	List Price \$	Size	Optimal Pressure	Maximum Pressure	Description
PMP20-BYB-E-S	407.00	20 cc	150 bar	350 bar	Pressure relief valve. Dual action hand pump for single-acting cylinder for fixing to wall.
PMO50-BYB-E-S	458.00	50 cc	50 bar	280 bar	
PMO70-BYB-E-S	649.00	70 cc	80 bar	200 bar	
PMP20-BYB-S	407.00	20 cc	150 bar	350 bar	As above, with release hand knob
PMO50-BYB-S	458.00	50 cc	50 bar	280 bar	
PMO70-BYB-S	649.00	70 cc	80 bar	200 bar	



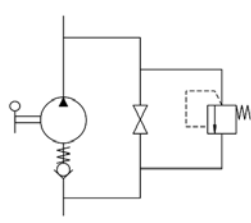
PMP



PMO



without release
hand knob

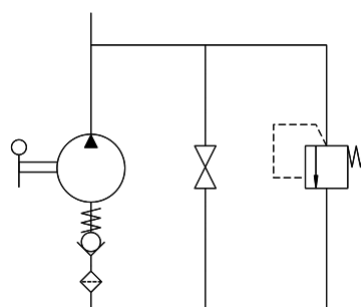
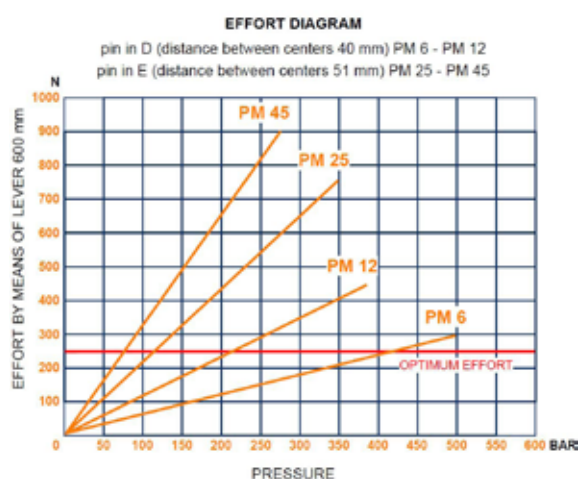


with release
hand knob

All hand pumps have rubber
protection on shaft

Single Acting Hand Pumps with Relief - Tank Mount

Part Number	List Price \$	Size	Optimal Pressure	Maximum Pressure	Description
PM12-BYB-S	407.00	12 cc	220 bar	380 bar	Pressure relief valve with relief hand knob. Dual action hand pump for single-acting cylinder for fixing to tank.
PM25-BYB-S	407.00	25 cc	120 bar	350 bar	
PM45-BYB-S	407.00	45 cc	80 bar	250 bar	
PM12-BYB-L-S	417.00	12 cc	220 bar	380 bar	As above, with release lever instead of hand knob
PM25-BYB-L-S	422.00	25 cc	120 bar	350 bar	
PM45-BYB-L-S	427.00	45 cc	80 bar	250 bar	



All hand pumps have rubber protection on shaft

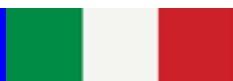
Tanks on page 47



with release
hand knob



with release
lever



PREMIUM
ITALIAN PRODUCT

HAND PUMPS, DIVERTER & BALL VALVES

Hand Pumps

Double Acting Hand Pumps with Relief - Tank Mount

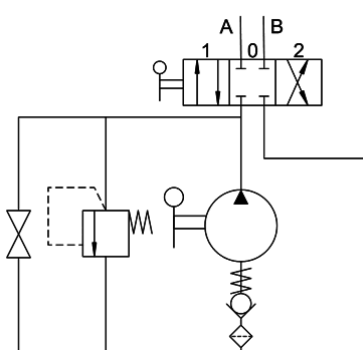
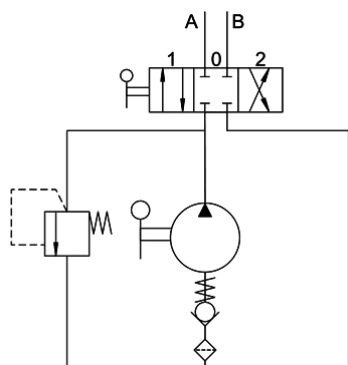
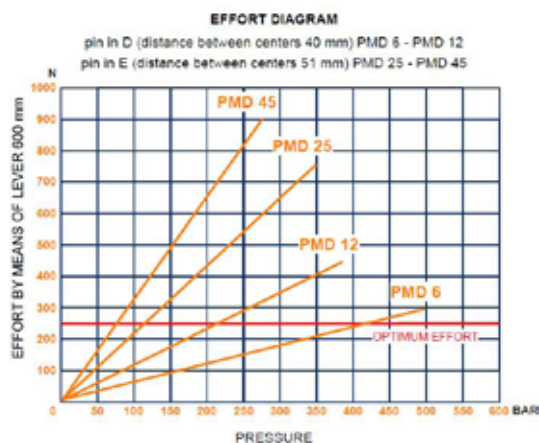
Part Number	List Price \$	Size	Optimal Pressure	Maximum Pressure	Description
PMD12-BYB-S	443.00	12 cc	220 bar	380 bar	Pressure relief valve. 4/3 flow divider closed centre. Dual action hand pump for double-acting cylinder for fixing to tank.
PMD25-BYB-S	448.00	25 cc	120 bar	350 bar	
PMD45-BYB-S	469.00	45 cc	80 bar	280 bar	
PMD12-BYA-L-S	500.00	12 cc	220 bar	380 bar	As above, with release lever.
PMD25-BYA-L-S	505.00	25 cc	120 bar	350 bar	
PMD45-BYA-L-S	525.00	45 cc	80 bar	280 bar	



Without release lever



With release lever

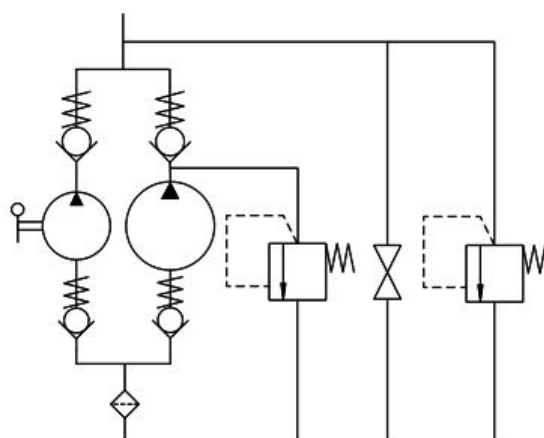
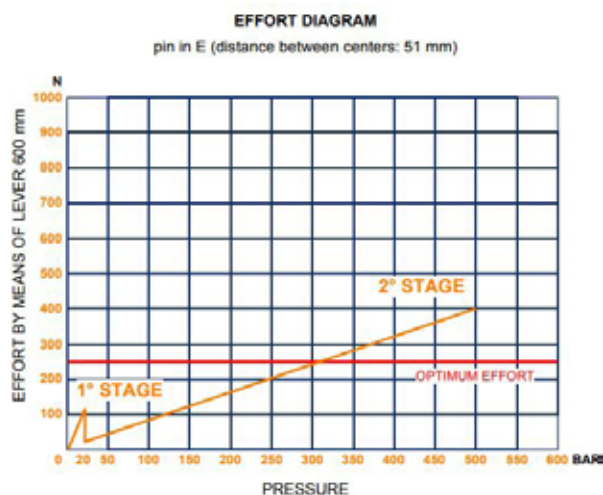


All hand pumps have rubber protection on shaft

Tanks on page 47

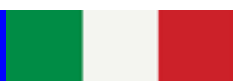
Hi-Lo Hand Pump with Relief - Tank Mount

Part Number	List Price \$	Size	Max Pressure		Relief
PM2V-5/80-A-BYB-PM-S	1329.00	80 cc (stage 1) 5 cc (stage 2)	500 bar (stage 1)	20 bar (stage 2)	Adjustable relief 50-500 bar



All hand pumps have rubber protection on shaft

Tanks on page 47



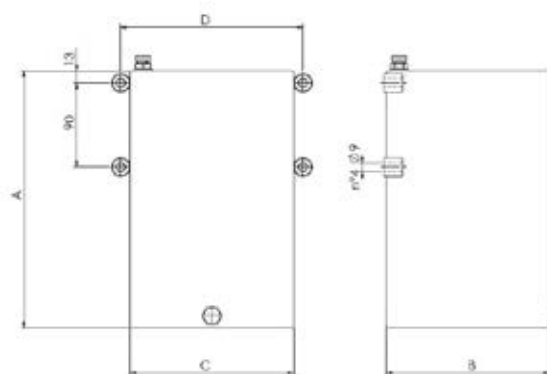
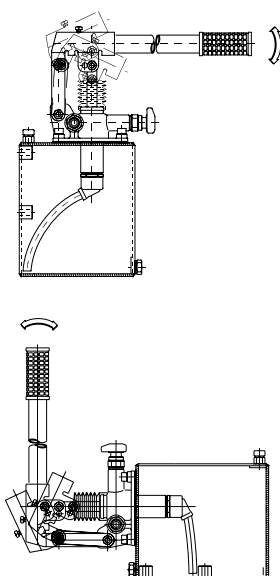
PREMIUM
ITALIAN PRODUCT

HAND PUMPS, DIVERTER & BALL VALVES

Hand Pump Tanks & Accessories

Tanks

Part Number	List Price \$	Size	A	B	C	D
6500.0140	134.00	1 L	120mm	150mm	100mm	120mm
6500.0141	139.00	2 L	185mm			
6500.0142	160.00	3 L	255mm			
6500.0143	191.00	5 L	200mm	175mm	175mm	195mm
6500.0144	227.00	7 L	275mm			
6500.0145	273.00	10 L	380mm			



All tanks come with
breather and suction tube

Hand Pump Parts

Part Number	List Price \$	Description
0038.0001.00.00	22.00	Rubber boot - pump shafts
6800.0009	41.00	Pump handle
3000.0000.01.00	31.00	Gasket & bolt kit - PM pumps
3000.0001.00.00	31.00	Gasket & bolt kit - PMD pumps
3000.0005.00.00	46.00	Lowering valve (blue knob)
3000.0006.00.00	36.00	Relief valve
3000.0007.00.00	57.00	Unload valve (lever)
036.0006.00.00	39.00	Tank breather



Counter Balance Valves		50
Hose Burst Valves		54
Check Valves		55
Needle Flow Control Valves		57
Barrel Flow Control Valves		58
Pressure Compensated Flow Control Valves		58
Priority Flow Controls		59
Cartridge Flow Dividers		60
Cross Line Relief Valves		61
Unloading Valves		61
Inline Relief Valves		63
Pressure Reducing Valves		64
End Stroke Valves		64
Load Shuttle Ball Valves		65
Sequence Valves		65
Rotating Couplings		68
Cartridge Valves		69

PREMIUM ITALIAN PRODUCT 



WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

INLINE & CARTRIDGE VALVES

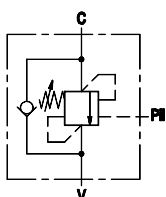
Counter Balance Valves

PREMIUM
ITALIAN PRODUCT

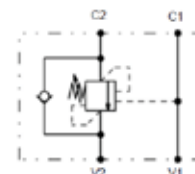
Single Counter Balance Valve

Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	Material
CBSEP-0230	221.00	3/8" BSPP	100-350 bar	60 lpm	4.2:1	Aluminium
CBSEP-0330	247.00	1/2" BSPP		40 lpm	4:1	
CB40SL01	196.00	1/4" BSPP				

CBSEP



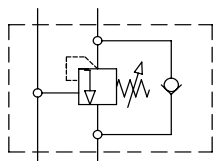
CB40



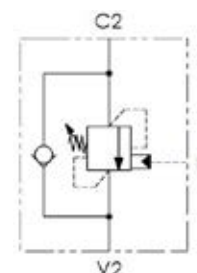
Single Counter Balance Valve, Open Centre

	Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	Material
NEW	VBCR1401S	175.00	1/4" BSPP	30-210 bar	30 lpm	4.25:1	Steel
NEW	VBCR1401S8	180.00				8.75:1	
	VBCL3801	155.00	3/8" BSPP		40 lpm	4.25:1	
	VBCL3801S3	155.00				3:1	
	VBCL3801S8	155.00				8:1	
						4.25:1	
NEW	VBCR3801S	175.00				8.75:1	
NEW	VBCR3801S8	180.00	1/2" BSPP		60 lpm	4.25:1	
	VBCL1201	185.00				3:1	
	VBCL1201S3	185.00				8:1	
	VBCL1201S8	185.00				4.25:1	
NEW	VBCR1201S	185.00				8.75:1	
NEW	VBCR1201S8	190.00	3/4" BSPP	60-350 bar	120 lpm	6.2:1	
	VBCL3402	288.00					

Note: VBCL series also available with 60-350 bar pressure range. Change part number 01 to 02 eg VBCL3801 > VBCL3802.



VBCL



VBCR



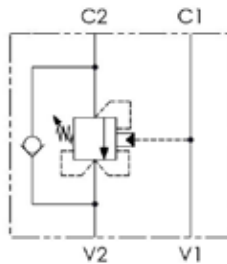
WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

Single Counter Balance Valve, Closed Centre

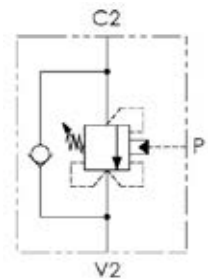
	Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	Material
NEW	VCCR1401S	220.00	1/4" BSPP	30-210 bar	30 lpm	4.25:1	Steel
NEW	VCCR1401S8	225.00				8.75:1	
	VCCL3801	185.00	3/8" BSPP		40 lpm	4.25:1	
NEW	VCCR3801S	220.00				8.75:1	
NEW	VCCR3801S8	225.00			1/2" BSPP	60 lpm	
	VCCL1201	206.00	8.75:1				
NEW	VCCR1201S	225.00					
NEW	VCCR1201S8	230.00			8.75:1		



VCCL

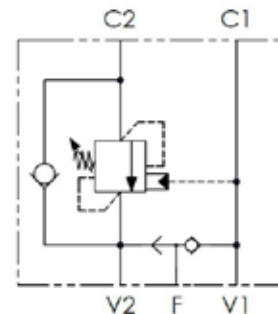


VCCR



NEW Single Counter Balance Valve, Open Centre, Brake Release

	Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	Material
	VBFP3801S	240.00	3/8" BSPP	30-210 bar	40 lpm	4.25:1	Steel



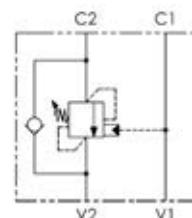
INLINE & CARTRIDGE VALVES

Counter Balance Valves

PREMIUM
ITALIAN PRODUCT

Single Counter Balance Valves, Banjo Bolt

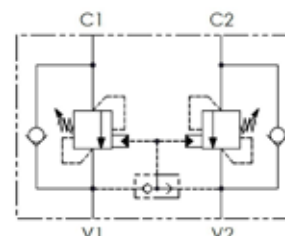
Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	Material
VBCB3801S	175.00	3/8" BSPP	30-210 bar	40 lpm	4.25:1	Steel
VBCB3802S	175.00		60-350 bar			



Dual Counter Balance Valves, Open Centre

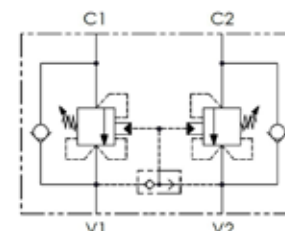
Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	Material
VBCD3801	278.00	3/8" BSPP	30-210 bar	40 lpm	4.25:1	Steel
VBCD3801S3	278.00				3:1	
VBCD3801S8	278.00				8:1	
VBCD1201	299.00	1/2" BSPP		60 lpm	4.25:1	
VBCD1201S3	299.00				3:1	
VBCD1201S8	299.00				8:1	
VBCD3402	474.00	3/4" BSPP		120 lpm	6.2:1	

Note: VBCD series also available with 60-350 bar pressure range. Change part number 01 to 02 eg VBCD3801 > VBCD3802.



Dual Counter Balance Valves, Closed Centre

Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	Material
VBCC3801	299.00	3/8" BSPP	30-210 bar	40 lpm	4.25:1	Steel
VBCC3802	299.00		60-350 bar			
VBCC1201	309.00	1/2" BSPP	30-210 bar	60 lpm		
VBCC1202	309.00		60-350 bar			

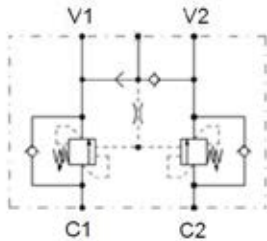


WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

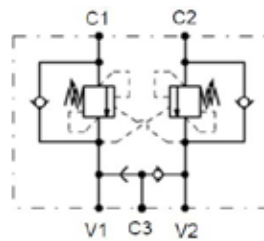
Dual Counter Balance Valves, Brake Release Shuttle

Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	Material
CBDLIL03	494.00	1/2" BSPP	100-350 bar	80 lpm	4.2:1	Steel
CBDLSF02	340.00	3/8" BSPP		60 lpm		
CBDLSF03	412.00	1/2" BSPP				

CBDLIL03



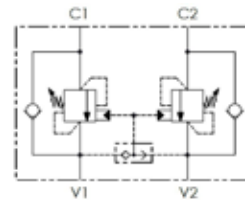
CBDLSF03



Dual Counter Balance Valves, Manifold Mount

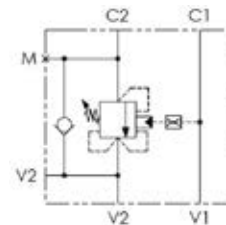
Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	Material
VBCF1202	309.00	1/2" BSPP	60-350 bar	60 lpm	1:4.25	Steel

Note: refer to website for technical drawings re mounting data



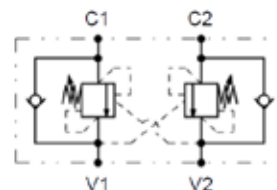
NEW Single Counter Balance Valve, Manifold Mount

Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	M Port	Material
VCLH38001S	230.00	3/8" BSPP	30-210 bar	40 lpm	4:1	1/4" BSPP	Steel



Dual Counter Balance Valves

Part Number	List Price \$	Ports	Pressure Range	Max Flow	Ratio	Material
CB40DL01	340.00	1/4" BSPP	50-350 bar	25 lpm	4:1	Steel



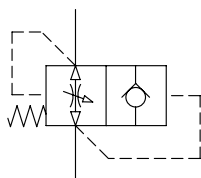
INLINE & CARTRIDGE VALVES

Hose Burst Valves

PREMIUM
ITALIAN PRODUCT

Hose Burst Valve Cartridges

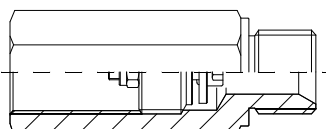
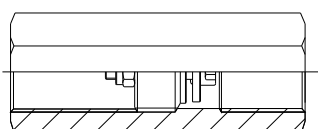
Part Number	List Price \$	Thread	Max Pressure	Max Flow
VUBA140	29.00	1/4" BSPP	350 bar	25 lpm
VUBA380	31.00	3/8" BSPP		50 lpm
VUBA120	36.00	1/2" BSPP		80 lpm
VUBA340	41.00	3/4" BSPP		150 lpm
VUBA100	46.00	1" BSPP		180 lpm



Installation tool available
Contact us for details

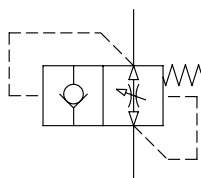
Hose Burst Valve Housings

Part Number	List Price \$	Ports	Thread Type	Material
61100087	15.00	1/4" BSPP	Male/Female	Steel
61100088	15.00	3/8" BSPP		
61100089	19.00	1/2" BSPP		
61100090	26.00	3/4" BSPP		
61100091	52.00	1" BSPP		
61100092	15.00	1/4" BSPP	Female/Female	
61100093	15.00	3/8" BSPP		
61100094	19.00	1/2" BSPP		
61100095	26.00	3/4" BSPP		



Hose Burst Adaptors

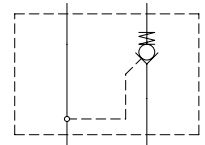
Part Number	List Price \$	Ports	Max Pressure	Max Flow
VUBASAE8	52.00	3/4" UNO - 3/4" JICM	315 bar	50 lpm



WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

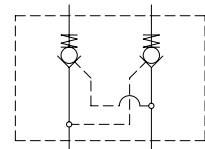
Single Inline Pilot Check Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Pilot Ratio	Material
VRSE140	113.00	1/4" BSPP	15 lpm	320 bar	1:4	Steel
VRSE380	113.00	3/8" BSPP	35 lpm			
VRSE120	134.00	1/2" BSPP	45 lpm		1:2.9	
VRSE340	196.00	3/4" BSPP	70 lpm			



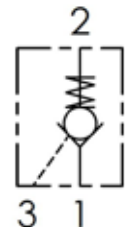
Dual Inline Pilot Check Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Pilot Ratio	Material
VRDE140	113.00	1/4" BSPP	15 lpm	320 bar	1:4	Steel
VRDE380	113.00	3/8" BSPP	35 lpm			
VRDE120	155.00	1/2" BSPP	45 lpm		1:2.9	
VRDE340	227.00	3/4" BSPP	70 lpm			



Single Inline Pilot Check Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Pilot Ratio	Material
VRPE140	113.00	1/4" BSPP	25 lpm	350 bar	1:5.3	Steel
VRPE380	134.00	3/8" BSPP	40 lpm		1:4.4	
VRPE120	139.00	1/2" BSPP	60 lpm		1:4.2	
VRPE340	242.00	3/4" BSPP	100 lpm	300 bar	1:4	
VRPE100	304.00	1" BSPP	150 lpm		1:4.1	



WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

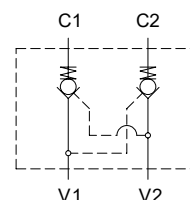
INLINE & CARTRIDGE VALVES

Check Valves

PREMIUM
ITALIAN PRODUCT

Dual Line-mount Pilot Check Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Pilot Ratio	Material
VRDL380	227.00	3/8" BSPP	35 lpm	350 bar	1:7	Steel
VRDL120	258.00	1/2" BSPP	50 lpm			



Inline Check Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Pilot Ratio	Material
VUR180	36.00	1/8" BSPP	5 lpm	400 bar	1 bar (3, 4.5 & 6 bar crack also available)	Steel
VUR140	36.00	1/4" BSPP	15 lpm			
VUR380	36.00	3/8" BSPP	30 lpm			
VUR120	41.00	1/2" BSPP	50 lpm			
VUR340	57.00	3/4" BSPP	90 lpm			
VUR100	93.00	1" BSPP	150 lpm	350 bar		
VUR114	165.00	1.1/4" BSPP	200 lpm			
VUR112	185.00	1.1/2" BSPP	300 lpm			
VUR200	258.00	2" BSPP	430 lpm	250 bar		
VMF380SP1	36.00	3/8" BSPP	30 lpm	400 bar		
VMF120SP1	41.00	1/2" BSPP	50 lpm			
VMF340SP1	57.00	3/4" BSPP	90 lpm			

VUR



VMF



Cartridge Check Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Pilot Ratio	Material
VUI140	25.00	1/4" BSPP	20 lpm	350 bar	0.5 bar	Steel
VUI380	36.00	3/8" BSPP	30 lpm			
VUI120	37.00	1/2" BSPP	50 lpm			
VUI340	46.00	3/4" BSPP	80 lpm			



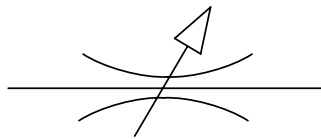
Installation tool available
Contact us for details



WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

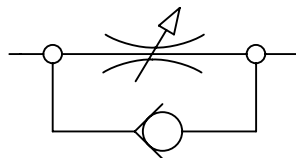
Needle Flow Control Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material
STBF140	73.00	1/4" BSPP	15 lpm	400 bar	Steel
STBF380	77.00	3/8" BSPP	30 lpm		
STBF120	88.00	1/2" BSPP	50 lpm		
STBF340	134.00	3/4" BSPP	80 lpm		
STBF100	185.00	1" BSPP	150 lpm		
STBF114	304.00	1.1/4" BSPP	200 lpm	350 bar	
STBF112	361.00	1.1/2" BSPP	300 lpm		



Needle Flow Control Valves with Reverse Flow Check

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material
STUF140	82.00	1/4" BSPP	15 lpm	400 bar	Steel
STUF380	88.00	3/8" BSPP	30 lpm		
STUF120	103.00	1/2" BSPP	50 lpm		
STUF340	160.00	3/4" BSPP	80 lpm		
STUF100	227.00	1" BSPP	150 lpm		
STUF114	412.00	1.1/4" BSPP	200 lpm	350 bar	
STUF112	474.00	1.1/2" BSPP	300 lpm		



Panel Mount Nuts

Part Number	List Price \$	Valve
84100022	10.00	STBF/STUF140/380
84100023	12.00	STBF/STUF120
84100024	19.00	STBF/STUF340/100



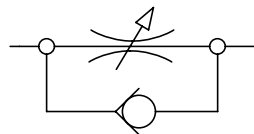
Barrel Flow Control Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material
VBRF140	67.00	1/4" BSPP	15 lpm	350 bar	Steel
VBRF380	82.00	3/8" BSPP	30 lpm		
VBRF120	98.00	1/2" BSPP	45 lpm		
VBRF340	144.00	3/4" BSPP	85 lpm	300 bar	
VBRF100	216.00	1" BSPP	150 lpm	250 bar	



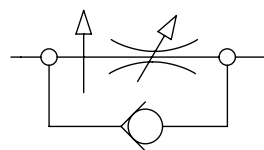
Barrel Flow Controls Valves with Reverse Flow Check

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material
VURF140	82.00	1/4" BSPP	15 lpm	350 bar	Steel
VURF380	93.00	3/8" BSPP	30 lpm		
VURF120	103.00	1/2" BSPP	45 lpm		
VURF340	165.00	3/4" BSPP	85 lpm	300 bar	
VURF100	247.00	1" BSPP	150 lpm	250 bar	



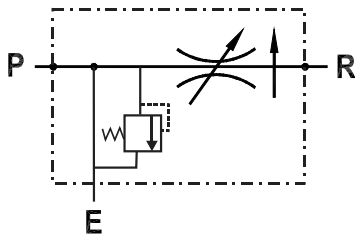
Pressure Compensated Flow Control Valves with Reverse Flow Check

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material
VRC140	165.00	1/4" BSPP	10 lpm	250 bar	Steel
VRC380	165.00	3/8" BSPP	18 lpm		
VRC120	196.00	1/2" BSPP	33 lpm		



Priority Flow Controls *(made in China)*

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material
FC51G1/2	263.00	1/2" BSPP	61 lpm	207 bar	Cast iron
FC51G3/4	263.00	3/4" BSPP	114 lpm		
FC51G3/8	263.00	3/8" BSPP	30 lpm		
FCB51G1/2	314.00	1/2" BSPP with relief	61 lpm		
FCB51G3/4	314.00	3/4" BSPP with relief	114 lpm		
FCB51G3/8	314.00	3/8" BSPP with relief	30 lpm		
FCB51-HK	26.00	Replacement handle kit			
FCB51-SK	10.00	Seal kit			



P - Pressure
R - Regulated
E - Exhaust

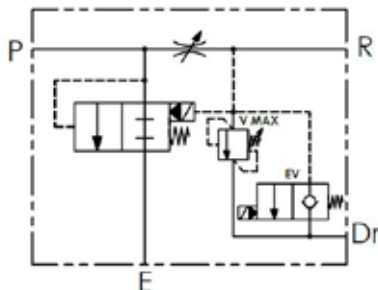


Priority Flow Controls with Relief & Solenoid

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material	Relief
VPP380VRV3	927.00	3/8" BSPP	50 lpm	250 bar	Aluminium	30-210 bar
VPP120VRV3	994.00	1/2" BSPP	90 lpm			

* please note voltage required - 12 or 24v DC

** please note normally open or normally closed solenoid valve



P - Pressure
R - Regulated
E - Exhaust
Dr - Drain



INLINE & CARTRIDGE VALVES

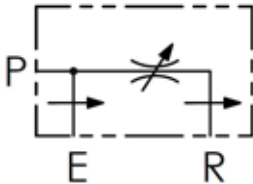
Flow Control Valves

PREMIUM
ITALIAN PRODUCT

Priority Flow Controls - Excess to line

Part Number	List Price \$	Ports	Max Flow	Regulated Max Flow	Max Pressure	Material
VPP380	525.00	3/8" BSPP	50 lpm	30 lpm	250 bar	Aluminium
VPP120	536.00	1/2" BSPP	90 lpm	50 lpm		
VPP340	845.00	3/4" BSPP	150 lpm	80 lpm		
PVEL05	773.00	1" BSPP	190 lpm	120 lpm	260 bar	

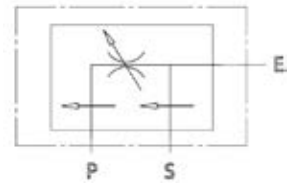
VPP



P - Pressure R - Regulated E - Exhaust



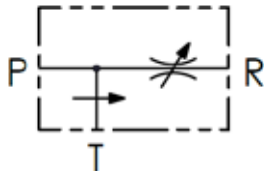
PVEL



P - Pressure S - Surplus E - Entry

Priority Flow Controls - Excess to tank

Part Number	List Price \$	Ports	Max Flow	Max Flow in R	Max Pressure	Material
VPT380	422.00	3/8" BSPP	50 lpm	30 lpm	250	Aluminium
VPT120	433.00	1/2" BSPP	80 lpm	50 lpm		
VPT340	597.00	3/4" BSPP	150 lpm	80 lpm		
VPT100	788.00	1" BSPP	240 lpm	150 lpm		

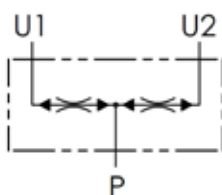


P - Pressure
R - Regulated
T - Tank



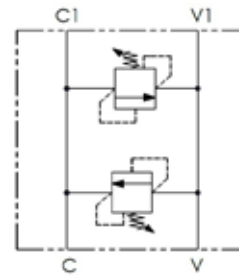
Cartridge Flow Dividers & Combiner

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material
DRF101380	350.00	3/8" BSPP	2-5 lpm	250 bar	Aluminium
DRF102380	350.00		3-10 lpm		
DRF103380	350.00		7-20 lpm		
DRF104380	350.00		15-40 lpm		



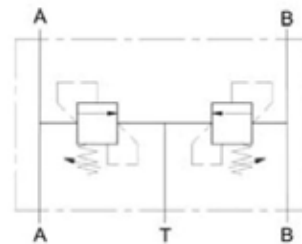
Cross Line Relief Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material
VBDC3802	175.00	3/8" BSPP	40 lpm	20-210 bar	Steel
VBDC3803	175.00			40-350 bar	
VBDC1202	196.00	1/2" BSPP		20-210 bar	
VBDC1203	196.00			40-350 bar	
DPRL800420A	288.00	3/4" BSPP	80 lpm	30-260 bar	Aluminium



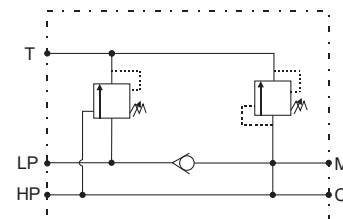
Dual Pressure Relief Common Tank Line Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material
DPRSU800320A	335.00	1/2" BSPP	80 lpm	260 bar	Aluminium



Inline Unloading Valves

Part Number	List Price \$	Ports					Max Flow		Max Pressure	Material
		M	C	HP	LP	T	HP	LP		
HLUV-03-20-30	489.00	1/4"	1/2"	3/8"	1/2"	3/4"	30 lpm	60 lpm	350 bar	Steel
HLUV-04-20-30	670.00	1/4"	3/4"	1/2"	3/4"	1"	20 lpm	100 lpm		



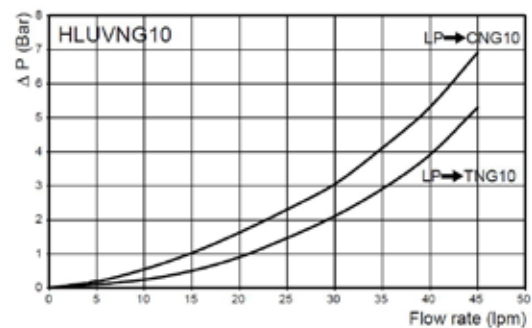
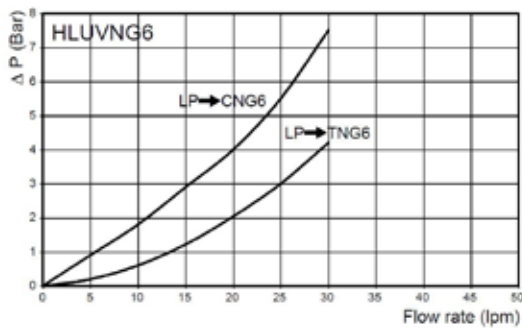
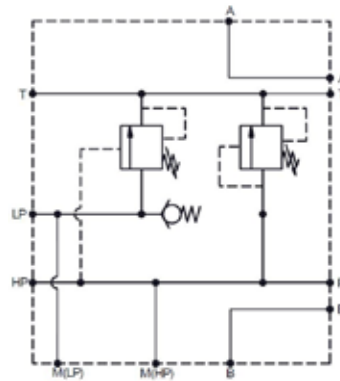
INLINE & CARTRIDGE VALVES

Unloading Valves

PREMIUM
ITALIAN PRODUCT

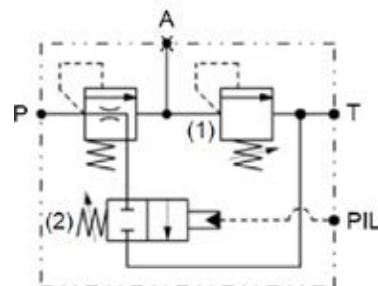
High Low Unloading Valves

Part Number	List Price \$	To suit	Relief	Unload	Material
HLUVNG6-20-30	670.00	Cetop 3	100-350 bar	20-260 bar	Aluminium
HLUVNG10-20-30	736.00	Cetop 5			



NEW Pilot Operated Unloading Valve

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Pilot Pressure Range	Relief Pressure Range	Material
VMSIP80R 03	830.00	P, A = 1/2" BSPP T = 3/8" BSPP PIL = 1/4" BSPP	40 lpm	250 bar	100-250 bar	30-260 bar	Steel



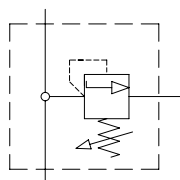
Inline Relief Valves

Part Number	List Price \$	Ports	Max Flow	Pressure Range	Material
VMDR1-1401C	113.00	1/4" BSPP	20 lpm	10-40 bar	Steel
VMDR1-1402C	113.00			20-110 bar	
VMDR1-1403C	113.00			30-210 bar	
VMDR1-1404C	113.00			40-350 bar	
VMDR40-3801C	118.00	3/8" BSPP	40 lpm	10-110 bar	
VMDR40-3802C	118.00			20-210 bar	
VMDR40-3803C	118.00			40-300 bar	
VMDR40-1201C	118.00	1/2" BSPP		10-110 bar	
VMDR40-1202C	118.00			20-210 bar	
VMDR40-1203C	118.00			40-300 bar	
VMDR90-1201C	149.00		80 lpm	10-100 bar	
VMDR90-1202C	149.00			20-250 bar	
VMDR90-1203C	149.00			40-350 bar	
VMDR120-3401C	216.00	3/4" BSPP	120 lpm	10-100 bar	
VMDR120-3402C	216.00			20-250 bar	
VMDR120-3403C	216.00			40-350 bar	
VMDR120-1001C	216.00	1" BSPP		10-100 bar	
VMDR120-1002C	216.00			20-250 bar	
VMDR120-1003C	216.00			40-350 bar	

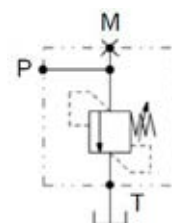
81300109	10.00	Adjustment handle, VMDR40 Series
81300023	12.00	Adjustment handle, VMDR90/120 Series



VMDR



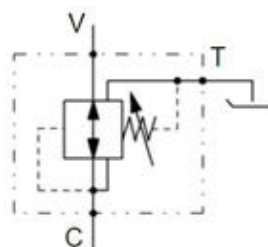
PRCDL



Part Number	List Price \$	Ports	Max Flow	Pressure Range	Max Pressure	Material
PRCDL1500430	319.00	3/4" BSPP	150 lpm	100-350 bar	250 bar	Aluminium
PRCDL2500530	551.00	1" BSPP	240 lpm	120-350 bar		

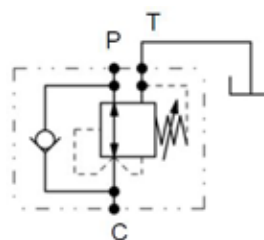
Pressure Reducing Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure In	Max Regulated Pressure	Material
VPREDAD02	330.00	3/8" BSPP	30 lpm	250 bar	140 bar	Aluminium



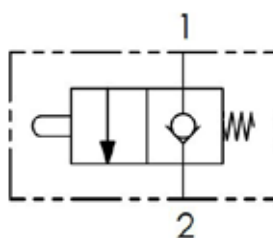
Pressure Reducing Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Max Pressure Range	Material
VARPED02	433.00	3/8" BSPP	20 lpm	260 bar	10-140 bar	Aluminium

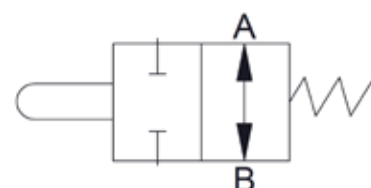


End Stroke Valves

	Part Number	List Price \$	Ports	Max Flow	Max Pressure	Function	Material
	FCM380N	144.00	3/8" BSPP	40 lpm	350 bar	Normally Closed	Steel
	FCM120N	206.00	1/2" BSPP	60 lpm	300 bar		
NEW	ESOP02	210.00	3/8" BSPP	30 lpm	350 bar	Normally Open	
NEW	ESOP03	230.00	1/2" BSPP	60 lpm			



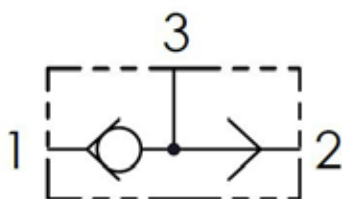
FCM



ESOP

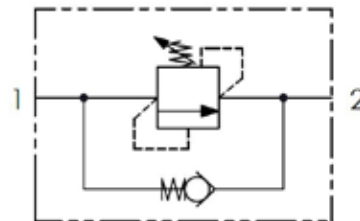
Load Shuttle Ball Valves

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Material
VUSF140	52.00	1/4" BSPP	20 lpm	350 bar	Steel
VUSF380	57.00	3/8" BSPP	40 lpm		
VUSF120	77.00	1/2" BSPP	60 lpm		
SHV04	165.00	3/4" BSPP	140 lpm		
SHV05	201.00	1" BSPP	180 lpm	300 bar	



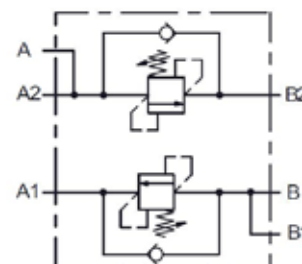
Sequence Valves

Part Number	List Price \$	Ports	Max Flow	Max Adjustment Pressure	Max Pressure	Material
VSL1402	165.00	1/4" BSPP	20 lpm	210 bar	350 bar	Steel
VSL1403	165.00			300 bar		
VSL3802	165.00	3/8" BSPP	40 lpm	210 bar		
VSL3803	165.00			300 bar		
VSL1202	175.00	1/2"BSPP		210 bar		
VSL1203	175.00			300 bar		
SV800420A	258.00	3/4" BSPP	80 lpm	260 bar		Aluminium
SV1500530C	510.00	1"BSPP	200 lpm			



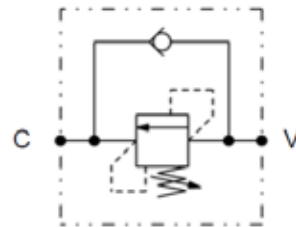
Dual Sequence Valves

Part Number	List Price \$	Ports	Max Flow	Pilot Ratio	Range	Material
DSV0220SF	639.00	3/8" BSPP	60 lpm	4.2:1	60-210 bar	Aluminium



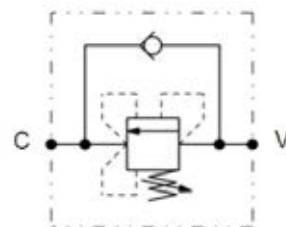
Sequence Valves - Line Mount

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Range	Material
SVL0210	201.00	3/8" BSPP	40 lpm	350 bar	30-120 bar	Steel
SVL0310	216.00	1/2" BSPP	80 lpm		30-140 bar	



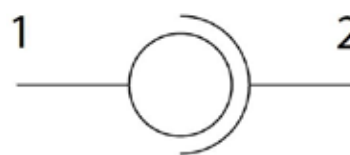
Sequence Valves - Line Mount, Back Pressure Proof

Part Number	List Price \$	Ports	Max Flow	Max Pressure	Range	Material
SVLCC0410	258.00	3/4" BSPP	120 lpm	350 bar	50-140 bar	Steel
SVLCC0420	258.00				80-250 bar	



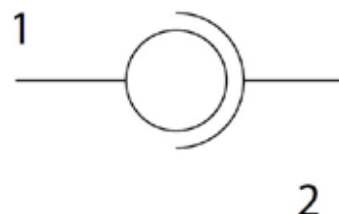
Straight Rotating Couplings

Part Number	List Price \$	Max Pressure	Max Flow	Max Rotation Pressure	Port
GGIL140	46.00	400 bar	25 lpm	200 bar	1/4" BSPP
GGIL380	52.00		35 lpm		3/8" BSPP
GGIL120	57.00	350 bar	60 lpm	150 bar	1/2" BSPP
GGIL340	82.00		100 lpm		3/4" BSPP
GGIL100	113.00		180 lpm	100 bar	1" BSPP



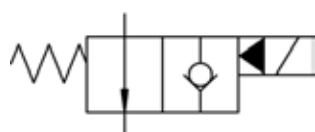
90 Degree Rotating Couplings

Part Number	List Price \$	Max Pressure	Max Flow	Max Rotation Pressure	Port
GG90140	52.00	400 bar	25 lpm	200 bar	1/4" BSPP
GG90380	57.00		35 lpm		3/8" BSPP
GG90120	67.00	350 bar	60 lpm	150 bar	1/2" BSPP
GG90340	103.00		100 lpm		3/4" BSPP
GG90100	129.00		180 lpm	100 bar	1" BSPP

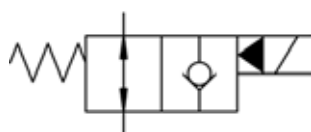


Cartridge Valves

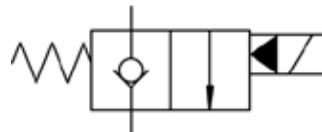
Part Number	List Price \$	Max Pressure	Max Flow	Manual Override	Cavity	
EVA6	134.00	210 bar	22 lpm	No	08-2	
EVC6	113.00			Yes		
EVE6	124.00					
EVA8	206.00	350 bar	40 lpm	No		10-2
EVC8	175.00			Yes		
EVE8	185.00					
EVA30	227.00		70 lpm	No	10-2	
EVC30	216.00			Yes		
EVE30	324.00			No		
EVA34	376.00			Yes		
EVC34	366.00					
EVE34	391.00	210 bar	22 lpm	No	08-2	
EDE6	149.00					
EDC9	253.00					
EDE9	278.00	350 bar	40 lpm	Yes	08-3	
EDA9	252.00			No		
EVC10	175.00			210 bar		12 lpm
EVE10	232.00	No				
EVC11	175.00	Yes				
EVE11	206.00					
VEM10	113.00	320 bar	50 lpm	Yes	10-2	
VEM6	103.00		30 lpm		08-2	



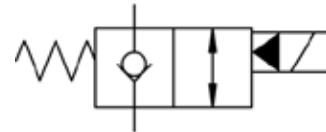
EVA6



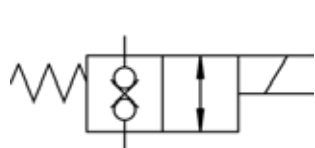
EVA8 / EVA30



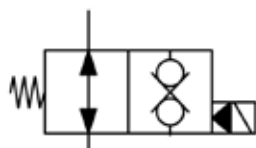
EVC6 / EVE6



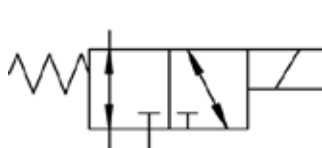
EVC8 / EVE8
EVC30 / EVE30



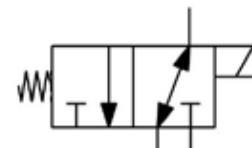
EDE6 / EDC9 / EDE9



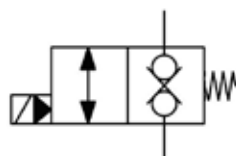
EDA9 / EVA 34



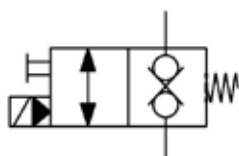
EVC10 / EVE10



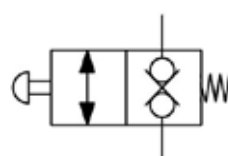
EVC11 / EVE11



EVC34



EVE34



VEM6 / VEM10

INLINE & CARTRIDGE VALVES

Relief Valves & Coils

PREMIUM
ITALIAN PRODUCT

Coils

Part Number	List Price \$	Voltage	Power	Core	Length
EC012DC	27.00	12v DC	18 w	13.2mm	40mm
EC024DC	27.00	24v DC			
EC11050	29.00	110v AC			
EC22050	27.00	220v AC			
EC36012DC	31.00	12v DC	22 w	13.2mm	40mm
EC36024DC	31.00	24v DC			
EC36220RAC	31.00	220v AC RAC			



Note: EC22050 can only be used with EVE6/EVC6 cartridge valves

EC36220RAC is compatible with all valves and should be used with DP-REC (DIN plug with rectifier AC to DC)

Relief Valves

Part Number	List Price \$	Cavity	Max Flow	Range
VMD1-C1	52.00	SAE8-2	20 lpm	10-40 bar
VMD1-C2	52.00			20-110 bar
VMD1-C3	52.00			30-210 bar
VMD1-C4	52.00			40-350 bar
DRV-S08-01-60-N-H	77.00		30 lpm	16-60 bar
DRV-S08-01-135-N-H	77.00			25-135 bar
DRV-S08-01-220-N-H	77.00			50-220 bar
DRV-S08-01-350-N-H	77.00			120-350 bar
CPS-08	27.00		Steel blanking plug	
VMD8C1	67.00	SAE10-2	40 lpm	10-90 bar
VMD8C2	67.00			20-210 bar
VMD8C3	67.00			70-350 bar
CPS-10	50.00		Steel blanking plug	
NEW VMD160-C1	120.00	SAE12-2	160 lpm	10-120 bar
NEW VMD160-C2	120.00			100-250 bar
NEW VMD160-C3	150.00			190-350 bar
NEW 81300095	5.00		Tamper Proof Cap for VMD160	
NEW 81300127	11.00		Hand Knob For VMD160	



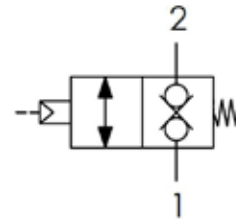
Cartridge Manifolds

Part Number	List Price \$	Cavity	Ports	Max Pressure	Material
62200357	54.00	SAE8-3	1/4" BSPP	210 bar	Aluminium
62200358	56.00		3/8" BSPP		
62200032	56.00	SAE8-2	1/4" BSPP	350 bar	Steel
62200051	58.00		3/8" BSPP		
NEW 62200373	90.00	SAE10-3	3/8" BSPP	210 bar	Aluminium
NEW 62200374	100.00		1/2" BSPP		
62200451	129.00	SAE10-2	3/8" BSPP	350 bar	Steel
62200452	129.00		1/2" BSPP		
NEW 62200419	170.00	SAE12-2	3/4" BSPP	350 bar	Steel
NEW 62200420	245.00		1" BSPP		



Pneumatic Pilot Valve

Part Number	List Price \$	Cavity	Max Flow	Max Pressure
VPN6	160.00	SAE8-2	40 lpm	350 bar



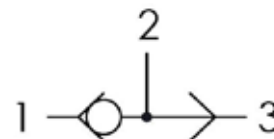
NEW Single Acting Pilot Operated Check Valve Cartridge

Part Number	List Price \$	Cavity	Max Flow	Max Pressure
VPR08	80.00	SAE8-3	15 lpm	350 bar
VPR10	85.00	SAE10-3	30 lpm	



NEW Cartridge Load Shuttle Valve

Part Number	List Price \$	Cavity	Max Flow	Max Pressure
SV08	50.00	SAE8-3	15 lpm	350 bar
SV10	55.00	SAE10-3	30 lpm	



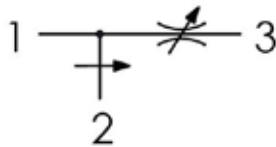
NEW Cartridge Check Valve

Part Number	List Price \$	Cavity	Pilot Ratio	Auxiliary port	Max Flow	Max Pressure
CUR6SP1	38.00	SAE8-2	1 bar	n/a	25 lpm	350 bar
CUR6SP3	40.00		3 bar			
CUR6SP4.5	40.00		4.5 bar			
CUR6SP1M	40.00		1 bar	1/4" BSPP		



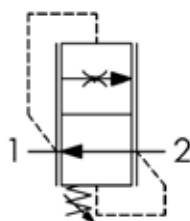
NEW Priority Flow Control Cartridge Valve Pressure Compensated

Part Number	List Price \$	Cavity	Max Flow	Regulated Max Flow	Max Pressure
CP10	315.00	SAE10-3	50lpm	30lpm	350 bar



NEW Flow Control Cartridge Valve Pressure Compensated

Part Number	List Price \$	Cavity	Controlled flow		Max Pressure
			Min	Max	
VCF63C	80.00	SAE8-2	1.3 lpm	5.1 lpm	350 bar
VCF65C	80.00		2.6 lpm	9.1 lpm	
VCF67C	80.00		4 lpm	14.4 lpm	
12000354	15.00	Hand Knob Ajustment for VCF6			



NEW Bidirectional Flow Control Cartridge

Part Number	List Price \$	Cavity	Max Flow	Max Pressure
VBF6C	45.00	SAE08-2	30 lpm	350 bar
VBF6V	55.00			



VBF6C



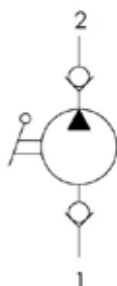
VBF6V



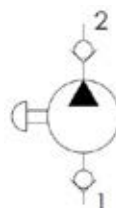
NEW Cartridge Hand Pumps

Part Number	List Price \$	Cavity	Displacement	Max Pressure
PME10	270.00	SAE10-2	0.6cc	200 bar
PME5P	130.00	SAE8-2		50 bar

Note: PME10 Is Supplied With A 500mm Lever



PME10

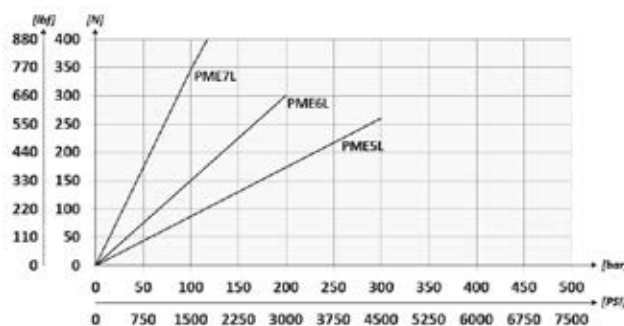
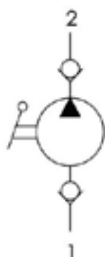


PME5P



NEW Inline Cartridge Hand Pumps

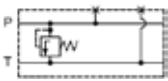
Part Number	List Price \$	Displacement	Max Pressure
PME06L	99.00	0.6cc	200 bar
62200023	91.00	Manifold to suit PME06L - 1/4" BSPP ports, 200 bar max pressure	



Sandwich Valves & Coils		76
Sandwich Valve Endplates, Manifolds & Bolt Kits		77
Sanwich Valves, Endplates, Manifolds & Coils		78
Cetop 3 Solenoid & Manual Valves		79
Cetop 3 Solenoid & Manual Valves		83
Cetop 3 DIN Plugs & Accessories		87
Cetop 5 Solenoid Valves (low-power coils)		88
Cetop 3 & 5 Auto-Cycling Valves		91
Cetop 5 Solenoid Valves (high-power coils)		92
Cetop 5 DIN Plugs & Accessories		95
Cetop 5 Solenoid Valves		96
Cetop 5 Accessories		98
Cetop 7 Solenoid Valves & Subplates		99
Cetop 3 Subplates		100
Cetop 3 Subplates		104
Cetop 5 Subplates		106
Cetop 5 Subplates		109
Cetop 3 & 5 Station Subplates & Manifolds		111
Relief Cartridges		116

PREMIUM ITALIAN PRODUCT 

Sandwich Valves

Part Number	List Price \$	Transition	Max Flow	Max Pressure	Ports	Diagram
HDF-ES-1C	350.00	Closed	20 lpm	250 bar	1/4" BSPP	
HDF-ES-1LL	324.00	Closed				
HDF-ES-4C	407.00	Open				
HDF-ES-3C	350.00	A + B to T				
HDF-ES-0C	350.00	Open				
HDF-ES-OML	324.00	Open				
AMF-MOP-25	216.00	Relief				

Sandwich valve prices do not include coils.



Coils

Part Number	List Price \$	Voltage	Amp Draw	Core Size	Length	Connector
BO1-012C	54.00	12v DC	2.8a	13.8mm	41.2mm	DP-LED-DC
BO1-024C	54.00	24v DC	1.4a			DP-LED-DC
BO1-230R	54.00	220v AC	0.17a			DP-LED-AC

Sandwich Valves - Endplates & Manifolds

Part Number	List Price \$	Material	Port	Description
PD1-03/32-0	113.00	Aluminium	n/a	End plate
PD1-03/32-5	159.00		3/8" BSP	Remote mount port plate
MAF-KIT-2	91.00		n/a	Remote mount kit
AMF-HP2	324.00			Hand pump, set 2cc
GE-01	45.00			Manual override knob for HDF valves



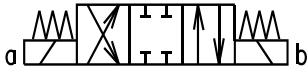
Sandwich Valves - Bolt Kits

Part Number	List Price \$	Description
VIT-HDF-M6X55	13.00	Bolt Kit - 1 Section HDF/CS Valve
VIT-HDF-M6X100	53.00	Bolt Kit - 2 Section HDF/CS Valve
VIT-HDF-M6X133	60.00	Bolt Kit - 3 Section HDF/CS Valve
VIT-HDF-M6X163	61.00	Bolt Kit - 4 Section HDF/CS Valve
VIT-HDF-M6X194	63.00	Bolt Kit - 5 Section HDF/CS Valve
VIT-HDF-M6X224	64.00	Bolt Kit - 6 Section HDF/CS Valve
VIT-HDF-M6X256	69.00	Bolt Kit - 7 Section HDF/CS Valve
VIT-HDF-M6X287	72.00	Bolt Kit - 8 Section HDF/CS Valve

CETOP VALVES, SUBPLATES & MANIFOLDS

Sandwich Valves

Sandwich Valves

Part Number	List Price \$	Transition	Voltage	Max Flow	Max Pressure	Ports	
CS-3C2-03-D12	278.00	Closed	12v	15 lpm	200 bar	1/4" BSPP	
CS-3C2-03-D24	278.00		24v				
CS-3C2-03-A22	278.00		220v				
CS-3C4-03-D12	278.00	A + B open to T	12v				
CS-3C4-03-D24	278.00		24v				
CS-3C4-03-A22	278.00		220v				
CS-C3B-03-D12	258.00	Open	12v				
CS-C3B-03-D24	258.00		24v				
CS-C3B-03-A22	258.00		220v				

Maximum 8 sections
CS valves include coils



Sandwich Valves - Endplates & Manifolds

Part Number	List Price \$	Material	Port	Description
T0407	82.00	Aluminium	n/a	End plate
T0407-PT	144.00		9/16" UNO	Remote mount port plate
MAF-KIT-2	91.00		n/a	Remote mount mounting bracket
250	185.00			Manifold for direct mount to power unit
FK0002B-CHP10	453.00			250 manifold with handpump
CS-03-M	46.00			Manual override knob for CSvalves

Coils

Part Number	List Price \$	Voltage	Amp Draw	Core Size	Length	Connector
CS-12V	62.00	12v DC	2.8a	13.2mm	37mm	DP-LED-DC
CS-24V	62.00	24v DC	1.4a			
CS-A22	124.00	220v AC	0.17a			DP-LED-AC

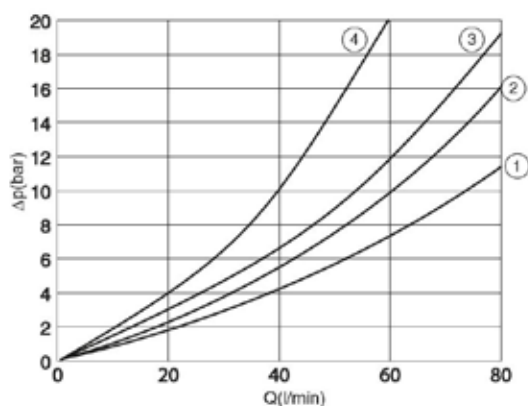
Aidro Cetop 3 Solenoid & Manual Valves

	Solenoid	Manual
Nominal Flow Rate	60 lpm	60 lpm
Maximum Recommended Flow	80 lpm	80 lpm
Maximum Nominal Pressure P,A,B	350 bar	320 bar
Maximum Pressure on T Port	210 bar	100 bar
Duty Cycle	100%	n/a
Bolts (single valve)	M5x45mm (tighten to 8Nm)	



Typical Diagrams

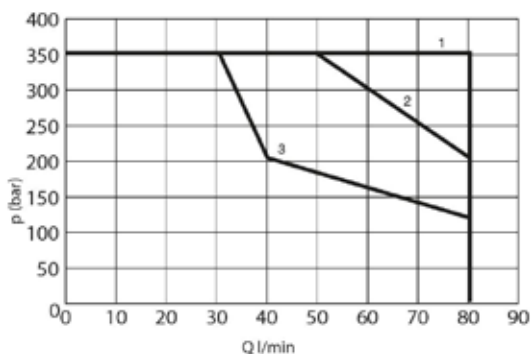
Typical Δp -Q curves for valves HD3-ES-* in standard configuration.
Measured with mineral oil at 32mm²/s and T=40°C



Spool	P-A	P-B	A-T	B-T	P-T
1C	1	1	2	2	
4C	3	3	4	4	1
0C	1	1	2	2	1
3C	1	1	2	2	
1LL	1	1	2	2	
1LLb	1	1	2	2	
1ML		1	2		
4ML	4		4		2
0ML		1	2		1
3ML	1		2		

Hydraulic Limit of Use

Δp -Q characteristics limits for safe use of HD3-ES-* solenoid operated valves.
Measured with mineral oil at 32mm²/s and T=40°C



Spool	
1C	1
4C	3
0C	2
3C	2
1LL	1
3ML	2
4ML	3
1ML	1
0ML	2
1MLb	1
1LLb	1
4MLb	3
0MLb	2
3MLb	2

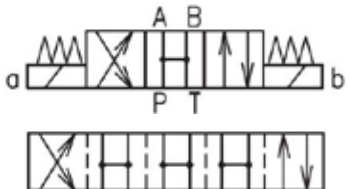
Hydraulic Fluid

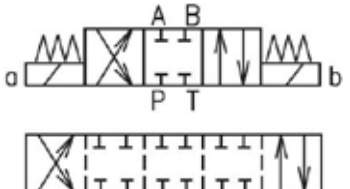
Seals and materials used on standard HD3-* valves are fully compatible with hydraulics fluids of mineral base, upgrading with antifoaming and antioxidantizing agents.

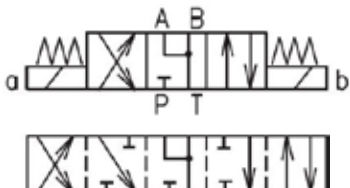


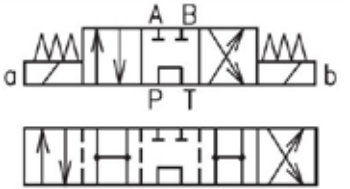
The hydraulic fluid must be kept clear and filtered to ISO4406 class 19/17/14, or better, and used in a recommended viscosity range from 10cSt to 60cSt.

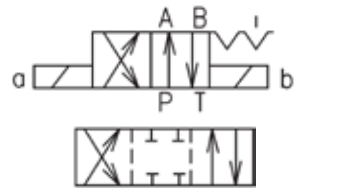
Aidro Cetop 3 Solenoid Valves

Part Number	List Price \$	Coil Voltage	
HD3-ES-0C-012C/10	381.00	12v DC	
HD3-ES-0C-024C/10	381.00	24v DC	
HD3-ES-0C-230A/10	438.00	230v AC	
HD3-ES-0C-115A/10	438.00	115v AC	

Part Number	List Price \$	Coil Voltage	
HD3-ES-1C-012C/10	381.00	12v DC	
HD3-ES-1C-024C/10	381.00	24v DC	
HD3-ES-1C-230A/10	438.00	230v AC	
HD3-ES-1C-115A/10	438.00	115v AC	

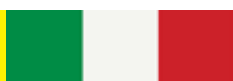
Part Number	List Price \$	Coil Voltage	
HD3-ES-3C-012C/10	381.00	12v DC	
HD3-ES-3C-024C/10	381.00	24v DC	
HD3-ES-3C-230A/10	438.00	230v AC	
HD3-ES-3C-115A/10	438.00	115v AC	

Part Number	List Price \$	Coil Voltage	
HD3-ES-4C-012C/10	433.00	12v DC	
HD3-ES-4C-024C/10	433.00	24v DC	
HD3-ES-4C-230A/10	489.00	230v AC	
HD3-ES-4C-115A/10	489.00	115v AC	

Part Number	List Price \$	Coil Voltage	
HD3-ES-1N-012C/10	470.00	12v DC	
HD3-ES-1N-024C/10	470.00	24v DC	
HD3-ES-1N-230A/10	525.00	230v AC	
HD3-ES-1N-115A/10	525.00	115v AC	

DIN Plugs & accessories
See page 87





PREMIUM
ITALIAN PRODUCT

CETOP VALVES, SUBPLATES & MANIFOLDS

Cetop 3 Valves

Aidro Cetop 3 Solenoid Valves

Part Number	List Price \$	Coil Voltage	
HD3-ES-0LL-012C/10	309.00	12v DC	
HD3-ES-0LL-024C/10	309.00	24v DC	
HD3-ES-0LL-230A/10	335.00	230v AC	
HD3-ES-0LL-115A/10	335.00	115v AC	

Part Number	List Price \$	Coil Voltage	
HD3-ES-0ML-012C/10	309.00	12v DC	
HD3-ES-0ML-024C/10	309.00	24v DC	
HD3-ES-0ML-230A/10	335.00	230v AC	
HD3-ES-0ML-115A/10	335.00	115v AC	

Part Number	List Price \$	Coil Voltage	
HD3-ES-1LL-012C/10	309.00	12v DC	
HD3-ES-1LL-024C/10	309.00	24v DC	
HD3-ES-1LL-230A/10	335.00	230v AC	
HD3-ES-1LL-115A/10	335.00	115v AC	

Part Number	List Price \$	Coil Voltage	
HD3-ES-1ML-012C/10	309.00	12v DC	
HD3-ES-1ML-024C/10	309.00	24v DC	
HD3-ES-1ML-230A/10	335.00	230v AC	
HD3-ES-1ML-115A/10	335.00	115v AC	

Part Number	List Price \$	Coil Voltage	
HD3-ES-3ML-012C/10	309.00	12v DC	
HD3-ES-3ML-024C/10	309.00	24v DC	
HD3-ES-3ML-230A/10	335.00	230v AC	
HD3-ES-3ML-115A/10	335.00	115v AC	

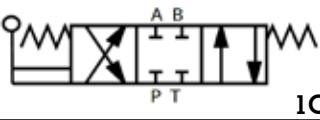
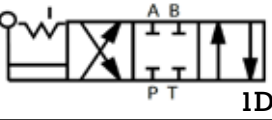
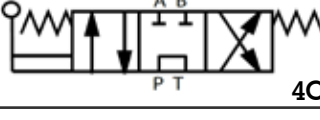
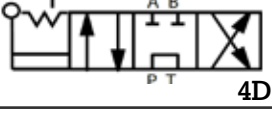
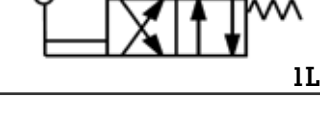
Part Number	List Price \$	Coil Voltage	
HD3-ES-4ML-012C/10	361.00	12v DC	
HD3-ES-4ML-024C/10	361.00	24v DC	
HD3-ES-4ML-230A/10	386.00	230v AC	
HD3-ES-4ML-115A/10	386.00	115v AC	



DIN Plugs & accessories
See page 87



Aidro Cetop 3 Manual Valves

Part Number	List Price \$	Coil Voltage		
HD3-LO-0C/10	561.00	Manual		
HD3-LO-0D/10	561.00	Manual w/ detent	0C	0D
Part Number	List Price \$	Coil Voltage		
HD3-LO-1C/10	561.00	Manual		
HD3-LO-1D/10	561.00	Manual w/ detent	1C	1D
Part Number	List Price \$	Coil Voltage		
HD3-LO-3C/10	561.00	Manual		
HD3-LO-3D/10	561.00	Manual w/ detent	3C	3D
Part Number	List Price \$	Coil Voltage		
HD3-LO-4C/10	613.00	Manual		
HD3-LO-4D/10	613.00	Manual w/ detent	4C	4D
Part Number	List Price \$	Coil Voltage		
HD3-LO-0LL/10	561.00	Manual		
HD3-LO-0N/10	561.00	Manual w/ detent	0LL	0N
Part Number	List Price \$	Coil Voltage		
HD3-LO-1LL/10	561.00	Manual		
HD3-LO-1N/10	561.00	Manual w/ detent	1LL	1N

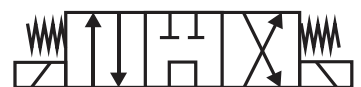


Cetop 3 Valves with coils & LED DIN plugs (Recommended maximum 40 lpm @ 210 bar)

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6-E-60-DC12-N-Z5L	237.00	12v DC	210 bar	
4DWG6-E-60-DC24-N-Z5L	237.00	24v DC		
4DWG6-E-60-AC220-N-Z5L	237.00	240v AC	160 bar	

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6-H-60-DC12-N-Z5L	237.00	12v DC	210 bar	
4DWG6-H-60-DC24-N-Z5L	237.00	24v DC		
4DWG6-H-60-AC220-N-Z5L	237.00	240v AC	160 bar	

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6-J-60-DC12-N-Z5L	237.00	12v DC	210 bar	
4DWG6-J-60-DC24-N-Z5L	237.00	24v DC		
4DWG6-J-60-AC220-N-Z5L	237.00	240v AC	160 bar	

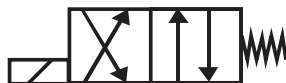
Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6-G-60-DC12-N-Z5L	237.00	12v DC	210 bar	
4DWG6-G-60-DC24-N-Z5L	237.00	24v DC		
4DWG6-G-60-AC220-N-Z5L	237.00	240v AC	160 bar	



CETOP VALVES, SUBPLATES & MANIFOLDS

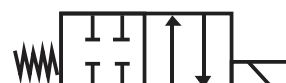
Cetop 3 Valves

Cetop 3 Valves with coils & LED DIN plugs (Recommended maximum 40 lpm @ 210 bar)

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6-C-60-DC12-N-Z5L	196.00	12v DC	210 bar	
4DWG6-C-60-DC24-N-Z5L	196.00	24v DC		
4DWG6-C-60-AC220-N-Z5L	196.00	240v AC	160 bar	

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6-D-60-DC12-N-Z5L	196.00	12v DC	210 bar	
4DWG6-D-60-DC24-N-Z5L	196.00	24v DC		
4DWG6-D-60-AC220-N-Z5L	196.00	240v AC	160 bar	

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6-HA-60-DC12-N-Z5L	196.00	12v DC	210 bar	
4DWG6-HA-60-DC24-N-Z5L	196.00	24v DC		
4DWG6-HA-60-AC220-N-Z5L	196.00	240v AC	160 bar	

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6-EB-60-DC12-N-Z5L	196.00	12v DC	210 bar	
4DWG6-EB-60-DC24-N-Z5L	196.00	24v DC		
4DWG6-EB-60-AC220-N-Z5L	196.00	240v AC	160 bar	

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6-EA-60-DC12-N-Z5L	196.00	12v DC	210 bar	
4DWG6-EA-60-DC24-N-Z5L	196.00	24v DC		
4DWG6-EA-60-AC220-N-Z5L	196.00	240v AC	160 bar	



Cetop 3 Manual Valves

Part Number	List Price \$	Coil Voltage	Max Press Tank	Transition	
4DWMG6-E-50	258.00	Manual	210 bar	Closed	
Part Number	List Price \$	Coil Voltage	Max Press Tank	Transition	
4DWMG6-H-50	258.00	Manual	210 bar	Open	
Part Number	List Price \$	Coil Voltage	Max Press Tank	Transition	
4DWMG6-J-50	258.00	Manual	210 bar	A + B To Tank	
Part Number	List Price \$	Coil Voltage	Max Press Tank	Transition	
4DWMG6-G-50	258.00	Manual	210 bar	Open	
4DWMG6-G-50-F	330.00	Manual Spring Return Detent			
Part Number	List Price \$	Coil Voltage	Max Press Tank	Transition	
4DWMG6-C-50	216.00	Manual	210 bar	Open	
4DWMG6-C-50-F	299.00	Manual Spring Return Detent			



CETOP VALVES, SUBPLATES & MANIFOLDS

Cetop 3 Valves

Cetop Valves with coils & manual lever

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6C-EL-E/DC12Z5L	361.00	12v DC	160 bar	
4DWG6C-EL-E/DC24Z5L	361.00	24v DC		
4DWG6C-EL-E/DC220Z5L	361.00	240v AC		

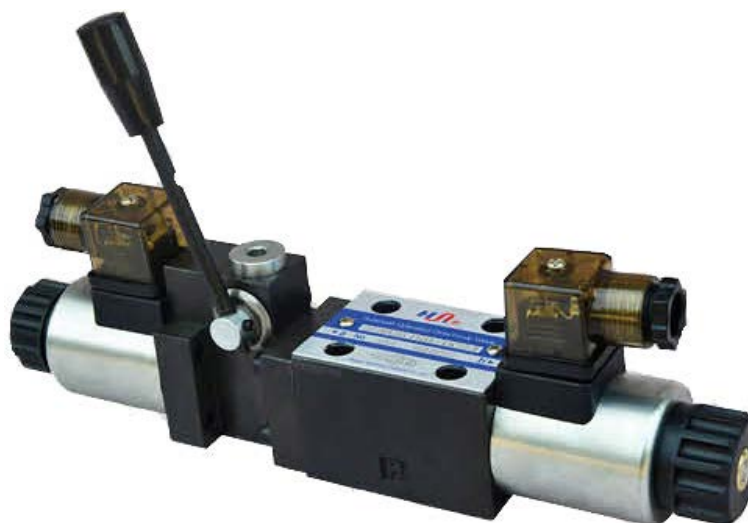
Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6E-EL-E/DC12Z5L	391.00	12v DC	160 bar	
4DWG6E-EL-E/DC24Z5L	391.00	24v DC		
4DWG6E-EL-E/DC220Z5L	391.00	240v AC		

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6J-EL-E/DC12Z5L	391.00	12v DC	160 bar	
4DWG6J-EL-E/DC24Z5L	391.00	24v DC		
4DWG6J-EL-E/DC220Z5L	391.00	240v AC		

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6G-EL-E/DC12Z5L	391.00	12v DC	160 bar	
4DWG6G-EL-E/DC24Z5L	391.00	24v DC		
4DWG6G-EL-E/DC220Z5L	391.00	240v AC		

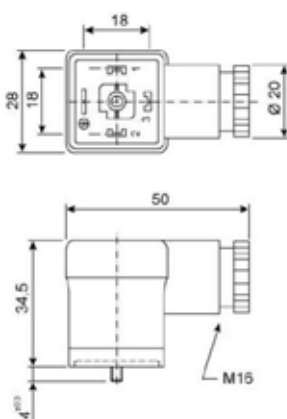
Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG6H-EL-E/DC12Z5L	391.00	12v DC	160 bar	
4DWG6H-EL-E/DC24Z5L	391.00	24v DC		
4DWG6H-EL-E/DC220Z5L	391.00	240v AC		

See page 98 for
coil options



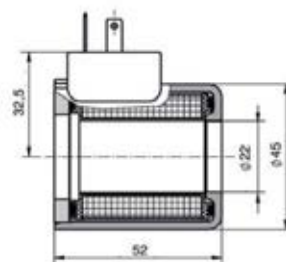
DIN Plugs

Part Number	List Price \$	Description	DIN Size	Terminals	Body	LED
DP-IP67-AC/DC-250	16.00	1-250V AC+DC, IP67	DIN 43650-A (ISO 4400)	3	Clear	Yes
DP-IP67-AC/DC-38	16.00	1-38V AC+DC, IP67				
DP-IP67-AC/DC-3M	33.00	1-38V AC+DC, 3m Cable, IP67				
DP-LED-AC	10.00	AC				
DP-LED-DC	10.00	DC				
DP-REC-LV	27.00	Rectifier AC to DC (1-48v)				
DP-REC	27.00	Rectifier AC to DC (70-250v)				



Coils (Low Power)

Part Number	List Price \$	Voltage	Wattage	Amps	Suits
BO3-12C	52.00	12v DC	29	2.4	HD3-ES
BO3-24C	52.00	24v DC	29	1.2	
BO3-48C	52.00	48v AC	29	0.6	HD5-ED
BO3-115A	82.00	115v AC	30	0.26	
BO3-230A	82.00	230v AC	32	0.14	



Spare Parts

Part Number	List Price \$	Description
KIT-03K	55.00	Manual override nut
T03-T	185.00	Soft shift kit
TAP-03-OR	43.00	Nut & spring kit

Bolt Kits

Part Number	List Price \$	Description
HD3-01-BK	5.00	Cetop 3 - 1 section bolt kit
HD3-02-BK	19.00	Cetop 3 - 2 section bolt kit
HD3-03-BK	26.00	Cetop 3 - 3 section bolt kit

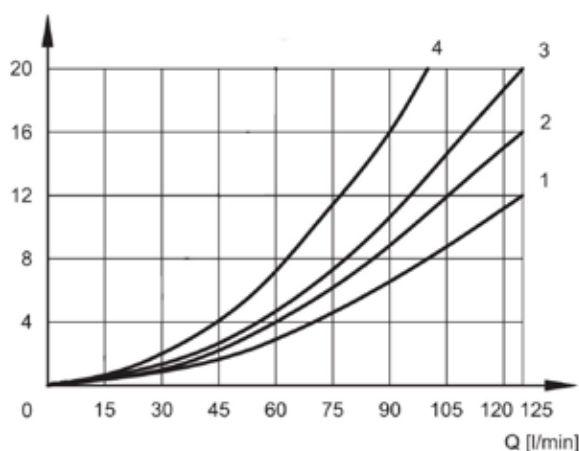
Aidro Cetop 5 Solenoid Valves - ED Series (low power BO3 coils)

Nominal Flow Rate	100 lpm
Maximum Recommended Flow	125 lpm
Maximum Nominal Pressure P,A,B	320 bar
Maximum Pressure on T Port	210 bar
Duty Cycle	100%
Bolts (single valve)	M6x35mm (tighten to 12Nm)



Typical Diagrams

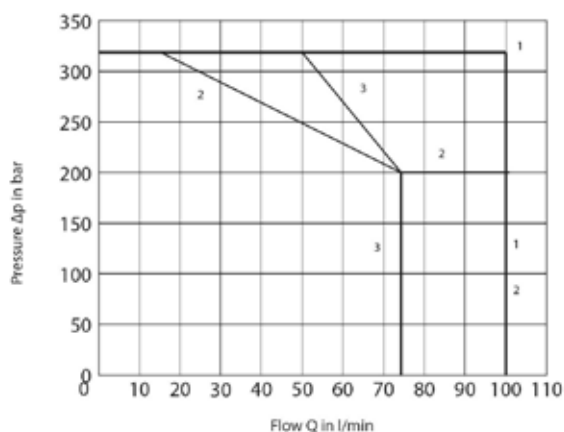
Typical Δp -Q curves for valves HD5-ED-* in standard configuration.
Measured with mineral oil at 32mm²/s and T=40°C



Spool	P-A	P-B	A-T	B-T	P-T
0C	1	1	1	1	1
1C	1	1	2	2	
3C	1	1	1	1	
4C	4	4	4	4	1
1LL	2	2	3	3	
1LLB	2	2	3	3	

Hydraulic Limit of Use

Δp -Q characteristics limits for safe use of HD5-ED-* solenoid operated valves.
Measured with mineral oil at 32mm²/s and T=40°C



Spool	
1C	1
4C	3
0C	1
3C	2
1LL	1
3ML	2
4ML	3
1ML	1
1MLb	1
1LLb	1
4MLb	3

Hydraulic Fluid

Seals and materials used on standard HD5-* valves are fully compatible with hydraulics fluids of mineral base, upgrading with antifoaming and antioxidizing agents.



The hydraulic fluid must be kept clear and filtered to ISO4406 class 19/17/14, or better, and used in a recommended viscosity range from 10cSt to 60cSt.



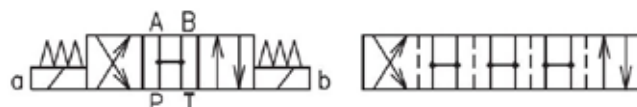
PREMIUM
ITALIAN PRODUCT

CETOP VALVES, SUBPLATES & MANIFOLDS

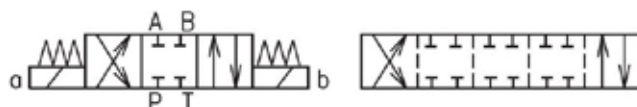
Cetop 5 Valves

Aidro Cetop 5 Solenoid Valves - ED Series (low power BO3 coils)

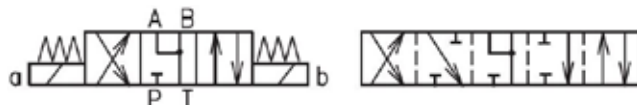
Part Number	List Price \$	Coil Voltage
HD5-ED-0C-012C/10	603.00	12v DC
HD5-ED-0C-024C/10	603.00	24v DC
HD5-ED-0C-230A/10	664.00	230v AC
HD5-ED-0C-115A/10	664.00	115v AC



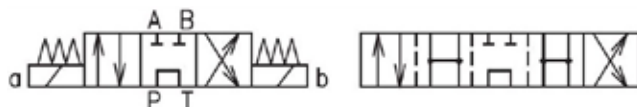
Part Number	List Price \$	Coil Voltage
HD5-ED-1C-012C/10	603.00	12v DC
HD5-ED-1C-024C/10	603.00	24v DC
HD5-ED-1C-230A/10	664.00	230v AC
HD5-ED-1C-115A/10	664.00	115v AC



Part Number	List Price \$	Coil Voltage
HD5-ED-3C-012C/10	603.00	12v DC
HD5-ED-3C-024C/10	603.00	24v DC
HD5-ED-3C-230A/10	664.00	230v AC
HD5-ED-3C-115A/10	664.00	115v AC



Part Number	List Price \$	Coil Voltage
HD5-ED-4C-012C/10	716.00	12v DC
HD5-ED-4C-024C/10	716.00	24v DC
HD5-ED-4C-230A/10	778.00	230v AC
HD5-ED-4C-115A/10	778.00	115v AC



Cetop 5 ED Series use low power coils - see page 87

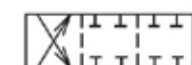
DIN Plugs & accessories
See page 95

Aidro Cetop 5 Solenoid Valves - ED Series (low power BO3 coils)

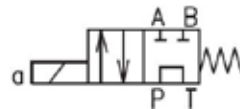
Part Number	List Price \$	Coil Voltage	 
HD5-ED-OLL-012C/10	500.00	12v DC	
HD5-ED-OLL-024C/10	500.00	24v DC	
HD5-ED-OLL-230A/10	530.00	230v AC	
HD5-ED-OLL-115A/10	530.00	115v AC	

Part Number	List Price \$	Coil Voltage	 
HD5-ED-OML-012C/10	500.00	12v DC	
HD5-ED-OML-024C/10	500.00	24v DC	
HD5-ED-OML-230A/10	530.00	230v AC	
HD5-ED-OML-115A/10	530.00	115v AC	

Part Number	List Price \$	Coil Voltage	 
HD5-ED-1LL-012C/10	500.00	12v DC	
HD5-ED-1LL-024C/10	500.00	24v DC	
HD5-ED-1LL-230A/10	530.00	230v AC	
HD5-ED-1LL-115A/10	530.00	115v AC	

Part Number	List Price \$	Coil Voltage	 
HD5-ED-1ML-012C/10	500.00	12v DC	
HD5-ED-1ML-024C/10	500.00	24v DC	
HD5-ED-1ML-230A/10	530.00	230v AC	
HD5-ED-1ML-115A/10	530.00	115v AC	

Part Number	List Price \$	Coil Voltage	 
HD5-ED-3ML-012C/10	500.00	12v DC	
HD5-ED-3ML-024C/10	500.00	24v DC	
HD5-ED-3ML-230A/10	530.00	230v AC	
HD5-ED-3ML-115A/10	530.00	115v AC	

Part Number	List Price \$	Coil Voltage	 
HD5-ED-4ML-012C/10	613.00	12v DC	
HD5-ED-4ML-024C/10	613.00	24v DC	
HD5-ED-4ML-230A/10	644.00	230v AC	
HD5-ED-4ML-115A/10	644.00	115v AC	

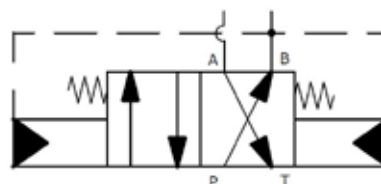
Cetop 5 ED Series use low power coils - see page 87

DIN Plugs & accessories
See page 95



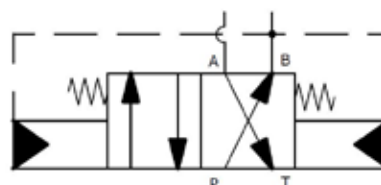
Auto-Cycling Valve - Cetop 3

Part Number	List Price \$	Description
ES610-41	901.00	Cetop 3 autocycling valve



Auto-Cycling Valve - Cetop 5

Part Number	List Price \$	Description
ES610-42	1061.00	Cetop 5 autocycling valve



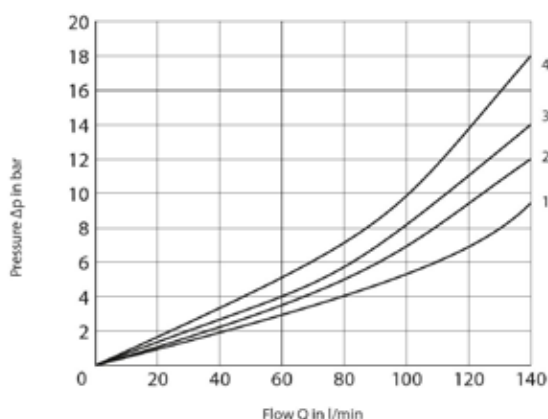
Aidro Cetop 5 Solenoid Valves - ES Series (high power BO5 coils)

Nominal Flow Rate	120 lpm
Maximum Recommended Flow	See graphs
Maximum Nominal Pressure P,A,B	320 bar
Maximum Pressure on T Port	210 bar
Duty Cycle	100%
Bolts (single valve)	M6x35mm (tighten to 12Nm)



Typical Diagrams

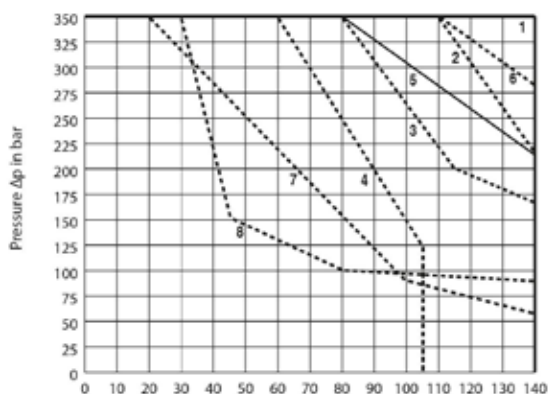
Typical Δp -Q curves for valves HD5-ES-* in standard configuration.
Measured with mineral oil at 32mm²/s and T=40°C



Spool	P-A	P-B	A-T	B-T	P-T
0C	1	1	2	2	1
1C	1	1	2	2	
3C	1	1	2	2	
4C	3	3	4	4	1
0LL	1	1	1	3	
1LL	1	1	2	2	
0ML		1	2		1
1ML		1	2		
3ML		1	2		
4ML	3			4	1

Hydraulic Limit of Use

Δp -Q characteristics limits for safe use of HD5-ES-* solenoid operated valves.
Measured with mineral oil at 32mm²/s and T=40°C



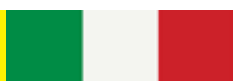
Spool	
0C	1
1C	1
0ML	1
1ML	1
3C	5
3ML	5
4C	3
0LL	2
1LL	2
1LLb	2
4ML	3

Hydraulic Fluid

Seals and materials used on standard HD5-* valves are fully compatible with hydraulics fluids of mineral base, upgrading with antifoaming and antioxidizing agents.



The hydraulic fluid must be kept clear and filtered to ISO4406 class 19/17/14, or better, and used in a recommended viscosity range from 10cSt to 60cSt.

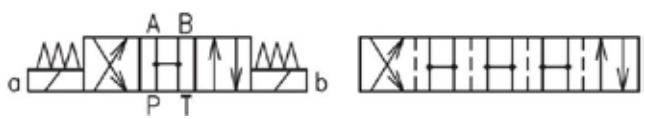


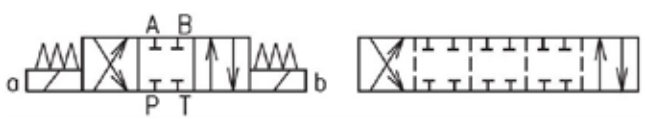
PREMIUM
ITALIAN PRODUCT

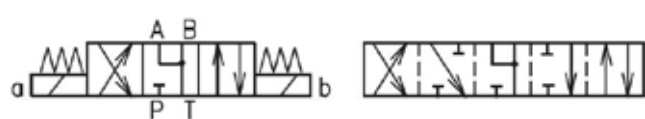
CETOP VALVES, SUBPLATES & MANIFOLDS

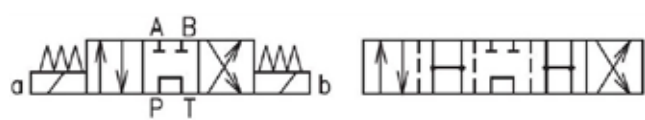
Cetop 5 Valves

Aidro Cetop 5 Solenoid - ES Series (high power BO5 coils)

Part Number	List Price \$	Coil Voltage	
HD5-ES-0C-012C/10	721.00	12v DC	
HD5-ES-0C-024C/10	721.00	24v DC	
HD5-ES-0C-230A/10	783.00	230v AC	
HD5-ES-0C-115A/10	783.00	115v AC	

Part Number	List Price \$	Coil Voltage	
HD5-ES-1C-012C/10	721.00	12v DC	
HD5-ES-1C-024C/10	721.00	24v DC	
HD5-ES-1C-230A/10	783.00	230v AC	
HD5-ES-1C-115A/10	783.00	115v AC	

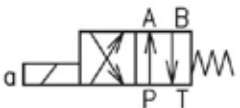
Part Number	List Price \$	Coil Voltage	
HD5-ES-3C-012C/10	680.00	12v DC	
HD5-ES-3C-024C/10	680.00	24v DC	
HD5-ES-3C-230A/10	783.00	230v AC	
HD5-ES-3C-115A/10	783.00	115v AC	

Part Number	List Price \$	Coil Voltage	
HD5-ES-4C-012C/10	839.00	12v DC	
HD5-ES-4C-024C/10	839.00	24v DC	
HD5-ES-4C-230A/10	901.00	230v AC	
HD5-ES-4C-115A/10	901.00	115v AC	



DIN Plugs & accessories
See page 95

Aidro Cetop 5 Solenoid - ES Series (high power BO5 coils)

Part Number	List Price \$	Coil Voltage	 
HD5-ES-0LL-012C/10	556.00	12v DC	
HD5-ES-0LL-024C/10	556.00	24v DC	
HD5-ES-0LL-230A/10	587.00	230v AC	
HD5-ES-0LL-115A/10	587.00	115v AC	

Part Number	List Price \$	Coil Voltage	 
HD5-ES-0ML-012C/10	556.00	12v DC	
HD5-ES-0ML-024C/10	556.00	24v DC	
HD5-ES-0ML-230A/10	587.00	230v AC	
HD5-ES-0ML-115A/10	587.00	115v AC	

Part Number	List Price \$	Coil Voltage	 
HD5-ES-1LL-012C/10	556.00	12v DC	
HD5-ES-1LL-024C/10	556.00	24v DC	
HD5-ES-1LL-230A/10	587.00	230v AC	
HD5-ES-1LL-115A/10	587.00	115v AC	

Part Number	List Price \$	Coil Voltage	 
HD5-ES-1ML-012C/10	556.00	12v DC	
HD5-ES-1ML-024C/10	556.00	24v DC	
HD5-ES-1ML-230A/10	587.00	230v AC	
HD5-ES-1ML-115A/10	587.00	115v AC	

Part Number	List Price \$	Coil Voltage	 
HD5-ES-3ML-012C/10	556.00	12v DC	
HD5-ES-3ML-024C/10	556.00	24v DC	
HD5-ES-3ML-230A/10	587.00	230v AC	
HD5-ES-3ML-115A/10	587.00	115v AC	

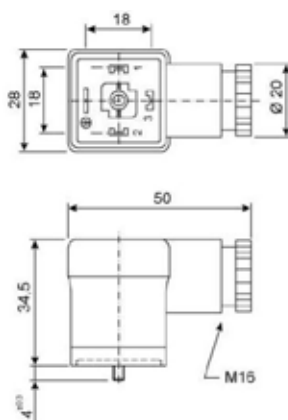
Part Number	List Price \$	Coil Voltage	 
HD5-ES-4ML-012C/10	675.00	12v DC	
HD5-ES-4ML-024C/10	675.00	24v DC	
HD5-ES-4ML-230A/10	706.00	230v AC	
HD5-ES-4ML-115A/10	706.00	115v AC	

DIN Plugs & accessories
See page 95



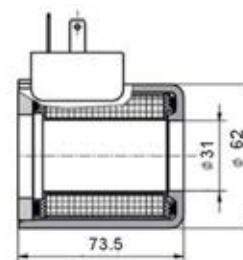
DIN Plugs

Part Number	List Price \$	Description	DIN Size	Terminals	Body	LED
DP-IP67-AC/DC-250	16.00	1-250V AC+DC, IP67	DIN 43650-A (ISO 4400)	3	Clear	Yes
DP-IP67-AC/DC-38	16.00	1-38V AC+DC, IP67				
DP-IP67-AC/DC-3M	33.00	1-38V AC+DC, 3m Cable, IP67				
DP-LED-AC	10.00	AC				
DP-LED-DC	10.00	DC				
DP-REC-LV	27.00	Rectifier AC to DC (1-48v)				
DP-REC	27.00	Rectifier AC to DC (70-250v)				



Coils (High Power)

Part Number	List Price \$	Voltage	Wattage	Amps	Suits
BO5-12C	124.00	12v DC	38	3.17	HD5-ES
BO5-24C	124.00	24v DC	41.5	1.73	
BO5-48C	124.00	48v AC	42	0.865	
BO5-115A	155.00	115v AC	46	0.40	
BO5-230A	155.00	230v AC	46	0.20	



For low power coils used with Cetop 5 ED Series, see page 87

Spare Parts

Part Number	List Price \$	Description
WK-05	32.00	Manual override nut
TAP-05-20	49.00	Nut & spring kit

Above items suit HD5-ES series

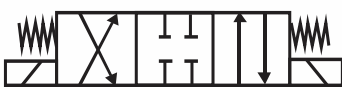
Bolt Kits (to suit ED and ES)

Part Number	List Price \$	Description
HD5-01-BK-ED	5.00	Cetop 5 - 1 section bolt kit
HD5-02-BK-ED	12.00	Cetop 5 - 2 section bolt kit
HD5-03-BK-ED	21.00	Cetop 5 - 3 section bolt kit
HD5-01-BK-ES	5.00	Cetop 5 - 1 section bolt kit
HD5-02-BK-ES	12.00	Cetop 5 - 2 section bolt kit
HD5-03-BK-ES	21.00	Cetop 5 - 3 section bolt kit

CETOP VALVES, SUBPLATES & MANIFOLDS

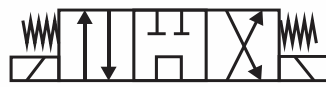
Cetop 5 Valves

Cetop 5 Valves with coils & LED DIN plugs (Recommended maximum 80 lpm @ 210 bar)

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG10-E-30-DC12-N-Z5L	361.00	12v DC	210 bar	
4DWG10-E-30-DC24-N-Z5L	361.00	24v DC		
4DWG10-E-30-AC220-N-Z5L	361.00	240v AC	160 bar	

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG10-H-30-DC12-N-Z5L	361.00	12v DC	210 bar	
4DWG10-H-30-DC24-N-Z5L	361.00	24v DC		
4DWG10-H-30-AC220-N-Z5L	361.00	240v AC	160 bar	

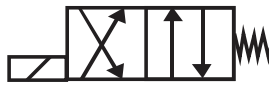
Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG10-J-30-DC12-N-Z5L	361.00	12v DC	210 bar	
4DWG10-J-30-DC24-N-Z5L	361.00	24v DC		
4DWG10-J-30-AC220-N-Z5L	361.00	240v AC	160 bar	

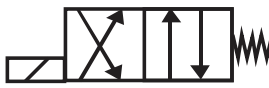
Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG10-G-30-DC12-N-Z5L	361.00	12v DC	210 bar	
4DWG10-G-30-DC24-N-Z5L	361.00	24v DC		
4DWG10-G-30-AC220-N-Z5L	361.00	240v AC	160 bar	

See page 98 for
coil options



Cetop 5 Valves with coils & LED DIN plugs (Recommended maximum 80 lpm @ 210 bar)

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG10-C-30-DC12-N-Z5L	299.00	12v DC	210 bar	
4DWG10-C-30-DC24-N-Z5L	299.00	24v DC		
4DWG10-C-30-AC220-N-Z5L	299.00	240v AC	160 bar	

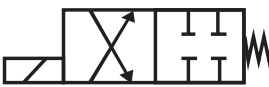
Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG10-D-30-DC12-N-Z5L	299.00	12v DC	210 bar	
4DWG10-D-30-DC24-N-Z5L	299.00	24v DC		
4DWG10-D-30-AC220-N-Z5L	299.00	240v AC	160 bar	

Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWG10-HA-30-DC12-N-Z5L	299.00	12v DC	210 bar	
4DWG10-HA-30-DC24-N-Z5L	299.00	24v DC		
4DWG10-HA-30-AC220-N-Z5L	299.00	240v AC	160 bar	

Part Number	List Price \$	Coil Voltage	Max Press Tank
4DWG10-EB-30-DC12-N-Z5L	299.00	12v DC	210 bar
4DWG10-EB-30-DC24-N-Z5L	299.00	24v DC	
4DWG10-EB-30-AC220-N-Z5L	299.00	240v AC	160 bar



Part Number	List Price \$	Coil Voltage	Max Press Tank
4DWG10-EA-30-DC12-N-Z5L	299.00	12v DC	210 bar
4DWG10-EA-30-DC24-N-Z5L	299.00	24v DC	
4DWG10-EA-30-AC220-N-Z5L	299.00	240v AC	





CETOP VALVES, SUBPLATES & MANIFOLDS

Coils & Plugs

Coils

Part Number	List Price \$	Size	Amp Draw	Core Size	Length	Connector
COIL-06-12VDC	62.00	Cetop 3	2.66a	23.5mm	50.7mm	DIN plug
COIL-06-24VDC	62.00		1.45a			
COIL-06-48VDC	62.00		0.7a			
COIL-06-110VAC	62.00		0.35a			
COIL-06-220VAC	62.00		0.17a			
COIL-10-12VDC	82.00	Cetop 5	4.0a	31.8mm	75.2mm	
COIL-10-24VDC	82.00		2.0a			
COIL-10-110VAC	82.00		0.5a			
COIL-10-220VAC	82.00		0.25a			



Manifold Plugs

Part Number	List Price \$	Size	Description
DT-BSPP04	5.00	G 1/4"	Hex key plug Encapsulated seal
DT-BSPP06	6.00	G 3/8"	
DT-BSPP08	7.00	G 1/2"	
DT-BSPP12	8.00	G 3/4"	
DT-BSPP16	10.00	G 1"	

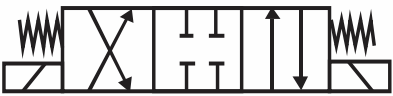
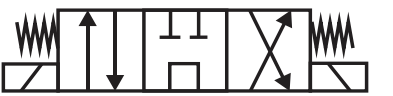
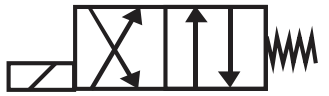


Manual Override Nuts

Part Number	List Price \$	Description
4WE6-DT-M-S	35.00	Manual override nut - fits 14mm solenoid thread
4WE6-DT-M-L	35.00	Manual override nut - fits 22mm solenoid thread



Cetop 7 Valves with coils & LED DIN plugs, pilot operated valves
(Recommended maximum 200 lpm @ 210 bar)

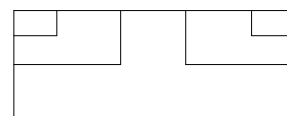
Part Number	List Price \$	Coil Voltage	Max Press Tank	
4DWHG16E60/DC12ET	798.00	12v DC	160 bar	
4DWHG16E60/DC24ET	798.00	24v DC		
4DWHG16E60/AC220ET	798.00	240v AC		
4DWHG16H60/DC12ET	798.00	12v DC	160 bar	
4DWHG16H60/DC24ET	798.00	24v DC		
4DWHG16H60/AC220ET	798.00	240v AC		
4DWHG16J60/DC12ET	798.00	12v DC	160 bar	
4DWHG16J60/DC24ET	798.00	24v DC		
4DWHG16J60/AC220ET	798.00	240v AC		
4DWHG16G60/DC12ET	798.00	12v DC	160 bar	
4DWHG16G60/DC24ET	798.00	24v DC		
4DWHG16G60/AC220ET	798.00	240v AC		
4DWHG16C60/DC12ET	680.00	12v DC	160 bar	
4DWHG16C60/DC24ET	680.00	24v DC		
4DWHG16C60/AC220ET	680.00	240v AC		
4DWHG16D60/DC12ET	680.00	12v DC	160 bar	
4DWHG16D60/DC24ET	680.00	24v DC		
4DWHG16D60/AC220ET	680.00	240v AC		

Subplates

Part Number	List Price \$	Stations	Function	Ports	Material
BS72S	361.00	1	Rear Ports	1" BSPP	Steel

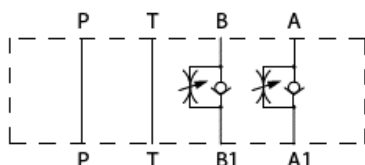


See page 98 for
coil options

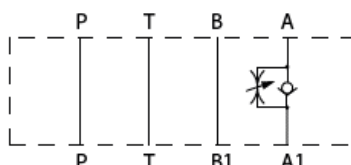


Flow Control Subplates (Meter In)

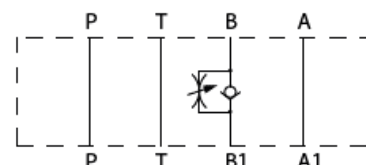
Part Number	List Price \$	Function	Max Recommended Flow Rate	Max Nominal Pressure
AM3-FX-AB/10	288.00	Flow control on A & B, meter in	60 lpm	320 bar
AM3-FX-A/10	258.00	Flow control on A, meter in		
AM3-FX-B/10	258.00	Flow control on B, meter in		



AM3-FX-AB



AM3-FX-A



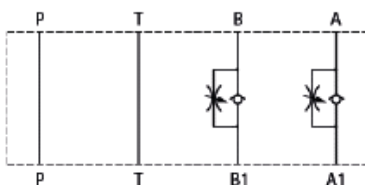
AM3-FX-B

Bolt kit required
See options on page 87

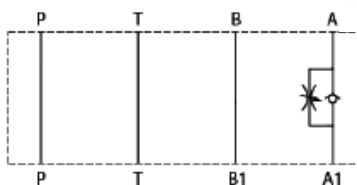


Flow Control Subplates (Meter Out)

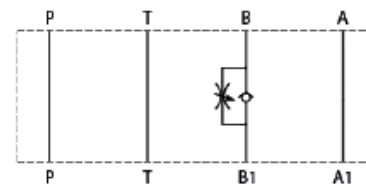
Part Number	List Price \$	Function	Max Recommended Flow Rate	Max Nominal Pressure
AM3-FC-AB/10	288.00	Flow control on A & B, meter out	60 lpm	320 bar
AM3-FC-A/10	258.00	Flow control on A, meter out		
AM3-FC-B/10	258.00	Flow control on B, meter out		



AM3-FC-AB



AM3-FC-A



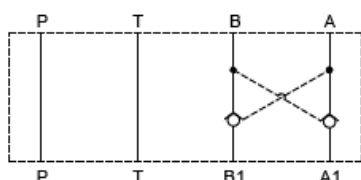
AM3-FC-B

Bolt kit required
See options on page 87

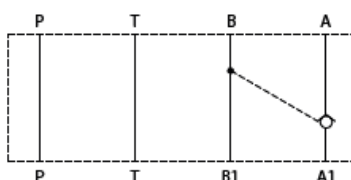


Pilot Check Subplates

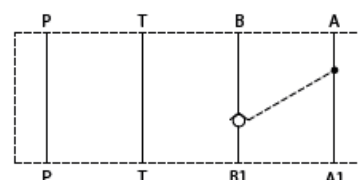
Part Number	List Price \$	Function	Max Recommended Flow Rate	Max Nominal Pressure
AM3-CP-AB/10	288.00	Pilot check on A & B	60 lpm	320 bar
AM3-CP-A/10	268.00	Pilot check on A		
AM3-CP-B/10	268.00	Pilot check on B		



AM3-CP-AB



AM3-CP-A



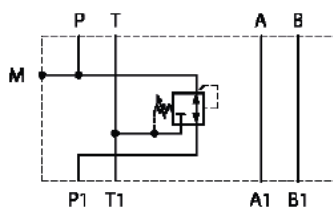
AM3-CP-B



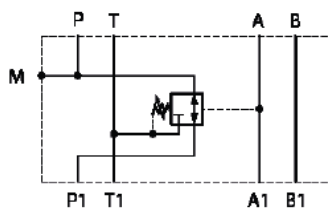
Bolt kit required
See options on page 87

Pressure Reducing Subplates (No Check)

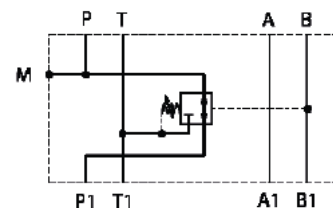
Part Number	List Price \$	Function	Max Recommended Flow Rate	Max Nominal Pressure
AM3-RO-P-12.5/10	489.00	Pressure reducing in P, 30-140 bar	60 lpm	320 bar
AM3-RO-A-12.5/10	520.00	Pressure reducing in A, 30-140 bar		
AM3-RO-B-12.5/10	520.00	Pressure reducing in B, 30-140 bar		
AM3-RO-P-25/10	489.00	Pressure reducing in P, 60-280 bar		
AM3-RO-A-25/10	520.00	Pressure reducing in A, 60-280 bar		
AM3-RO-B-25/10	520.00	Pressure reducing in B, 60-280 bar		



AM3-RO-P



AM3-RO-A



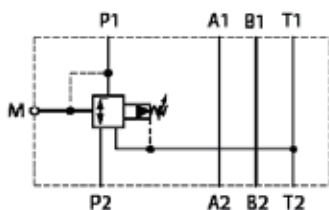
AM3-RO-B



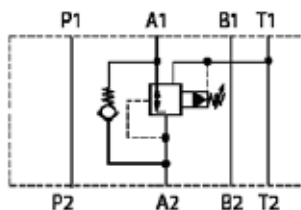
Bolt kit required
See options on page 87

Pressure Reducing Subplates (With Check)

Part Number	List Price \$	Function	Pressure Range	Max Recommended Flow Rate	Max Nominal Pressure
AM3-RP-P-20/10	515.00	Pressure reducing in P	30-140 bar	60 lpm	320 bar
AM3-RP-AC-20/10	546.00	Pressure reducing in A			
HD3-02-RP-BK	19.00	2 section bolt kit			
HD3-03-RP-BK	26.00	3 section bolt kit			



AM3-RP-P

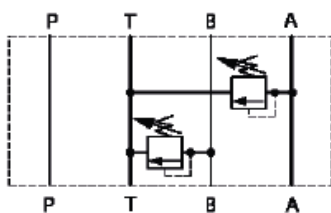


AM3-RP-AC

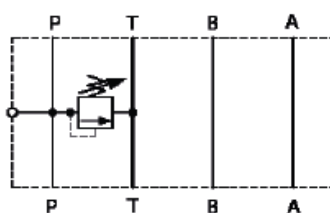


Direct Acting Pressure Relief Subplates

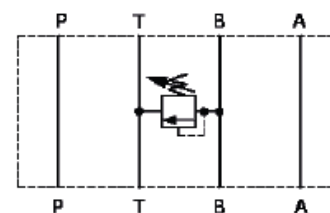
Part Number	List Price \$	Function	Pressure Range	Max Recommended Flow Rate	Max Nominal Pressure
AM3-MO-P-12.5/10	294.00	Direct acting relief on P	25-125 bar	60 lpm	320 bar
AM3-MO-B-12.5/10	294.00	Direct acting relief on B			
AM3-MO-BA-12.5/10	422.00	Direct acting relief on A & B			
AM3-MO-P-20/10	294.00	Direct acting relief on P	40-250 bar		
AM3-MO-B-20/10	294.00	Direct acting relief on B			
AM3-MO-BA-20-20/10	422.00	Direct acting relief on A & B			
AM3-MO-P-32/10	294.00	Direct acting relief on P	100-320 bar		
AM3-MO-B-32/10	294.00	Direct acting relief on B			
AM3-MO-BA-32-32/10	422.00	Direct acting relief on A & B			



AM3-MO-BA



AM3-MO-P



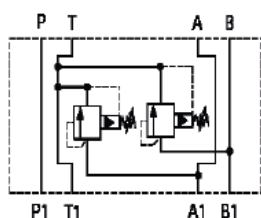
AM3-MO-B



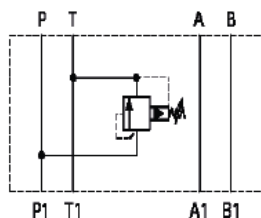
Bolt kit required
See options on page 87

Pilot Operated Pressure Relief Subplates

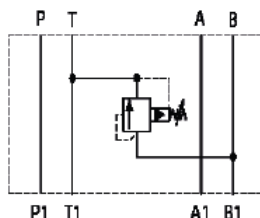
Part Number	List Price \$	Function	Pressure Range	Max Recommended Flow Rate	Max Nominal Pressure
AM3-MP-P-6.3/10	417.00	Pilot operated relief on P	10-70 bar	60 lpm	320 bar
AM3-MP-B-6.3/10	417.00	Pilot operated relief on B			
AM3-MP-BA-6.3-6.3/10	675.00	Pilot operated relief on A & B			
AM3-MP-P-12.5/10	417.00	Pilot operated relief on P	10-140 bar		
AM3-MP-B-12.5/10	417.00	Pilot operated relief on B			
AM3-MP-BA-12.5-12.5/10	675.00	Pilot operated relief on A & B			
AM3-MP-P-20/10	417.00	Pilot operated relief on P	20-210 bar		
AM3-MP-B-20/10	417.00	Pilot operated relief on B			
AM3-MP-BA-20-20/10	675.00	Pilot operated relief on A & B			
AM3-MP-P-32/10	417.00	Pilot operated relief on P	20-320 bar		
AM3-MP-B-32/10	417.00	Pilot operated relief on B			
AM3-MP-BA-32-32/10	675.00	Pilot operated relief on A & B			



AM3-MP-BA



AM3-MP-P

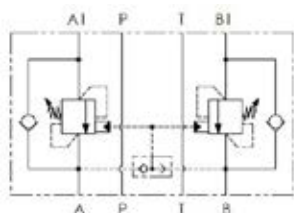


AM3-MP-B

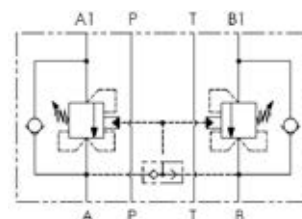


Cetop 3 Counterbalance Valves

Part Number	List Price \$	Max Pressure	Centre	Max Flow	Ratio
VBCS0601S	340.00	210 bar	Open	40 lpm	1:4.25
VBCS0602S	340.00	350 bar			
VBCT0601S	391.00	210 bar	Closed		
VBCT0602S	391.00	350 bar			



VBCS



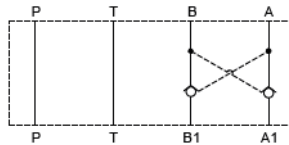
VBCT

CETOP VALVES, SUBPLATES & MANIFOLDS

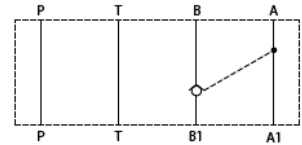
Cetop 3 Subplates

Pilot Check Subplates

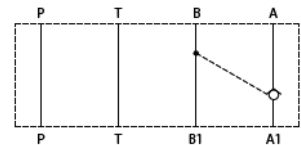
Part Number	List Price \$	Max Pressure	Function
Z2DS6-50	175.00	250 bar	Pilot check on A & B
Z2DS6A-50	155.00		Pilot check on A
Z2DS6B-50	155.00		Pilot check on B



Z2DS6-50



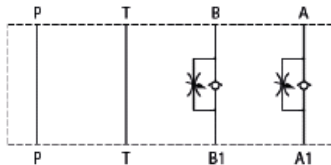
Z2DS6DB-50



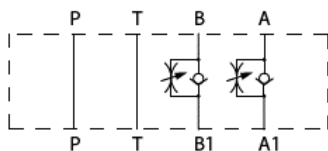
Z2DS6DA-50

Flow Control Subplates (steel body)

Part Number	List Price \$	Max Pressure	Function
Z2FDS630-S	185.00	250 bar	Flow control on A & B, meter in
Z2FDS630-S2	185.00		Flow control on A & B, meter out



Z2FDS630-S2

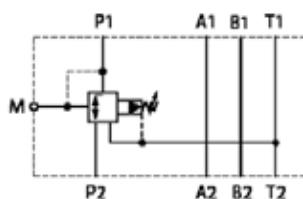


Z2FDS630-S

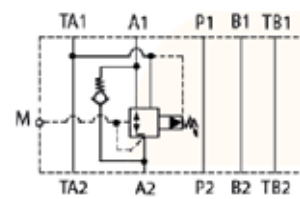


Pressure Reducing Subplates (steel body)

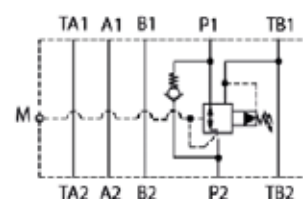
Part Number	List Price \$	Max Pressure	Function
ZPR6DP2-30-210-Y-M	196.00	250 bar	Pressure reducing in P, 70-210 bar
ZPR6DA2-30-210-Y-M	196.00		Pressure reducing in A, 70-210 bar
ZPR6DB2-30-210-Y-M	196.00		Pressure reducing in B, 70-210 bar



ZPR6DP



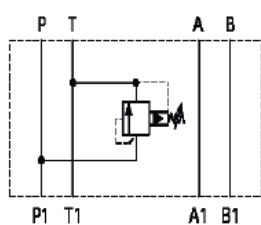
ZPR6DA



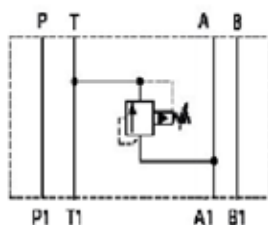
ZPR6DB

Relief Subplates (steel body)

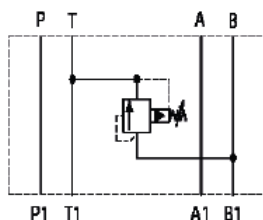
Part Number	List Price \$	Max Pressure	Function
ZPB6VP-1-315	196.00	250 bar	Relief on P, 70-250 bar
ZPB6VA-1-315	196.00		Relief on A, 70-250 bar
ZPB6VB-1-315	196.00		Relief on B, 70-250 bar
ZPB6VC-1-315	309.00		Relief on A & B, 70-250 bar



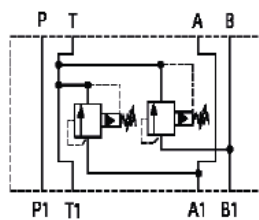
P



A



B

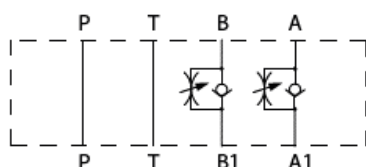


A & B

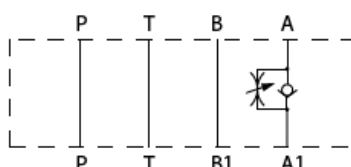


Flow Control Subplates (Meter In)

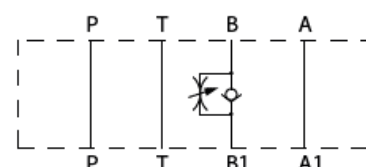
Part Number	List Price \$	Function	Max Recommended Flow Rate	Max Nominal Pressure
AM5-FX-AB/10	500.00	Flow control on A & B, meter in	100 lpm	320 bar
AM5-FX-A/10	474.00	Flow control on A, meter in		
AM5-FX-B/10	474.00	Flow control on B, meter in		



AM5-FX-AB



AM5-FX-A



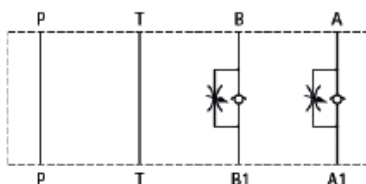
AM5-FX-B

Bolt kit required
See options on page 95

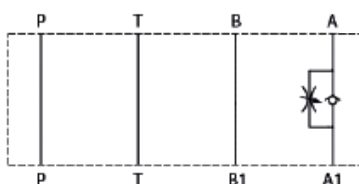


Flow Control Subplates (Meter Out)

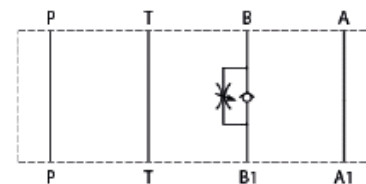
Part Number	List Price \$	Function	Max Recommended Flow Rate	Max Nominal Pressure
AM5-FC-AB/10	500.00	Flow control on A & B, meter out	100 lpm	320 bar
AM5-FC-A/10	474.00	Flow control on A, meter out		
AM5-FC-B/10	474.00	Flow control on B, meter out		



AM5-FC-AB



AM5-FC-A



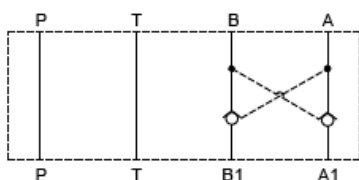
AM5-FC-B

Bolt kit required
See options on page 95

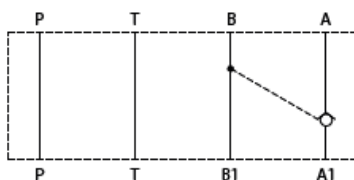


Pilot Check Subplates

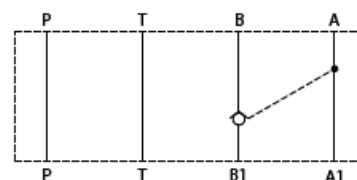
Part Number	List Price \$	Function	Max Recommended Flow Rate	Max Nominal Pressure
AM5-CP-AB/10	530.00	Pilot check on A & B	100 lpm	320 bar
AM5-CP-A/10	494.00	Pilot check on A		
AM5-CP-B/10	494.00	Pilot check on B		
AM5-CP-AB/20	670.00	Pilot check on A & B	140 lpm	350 bar
AM5-CP-A/20	597.00	Pilot check on A		
AM5-CP-B/20	597.00	Pilot check on B		



AM5-CP-AB



AM5-CP-A



AM5-CP-B



AM5-CP

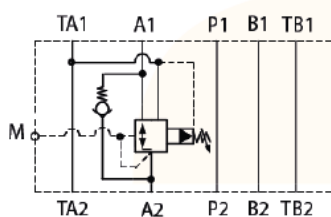


AM5-RP

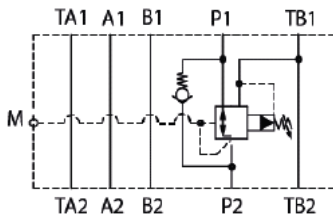
Bolt kit required
See options on page 95

Pressure Reducing Subplates (With Check)

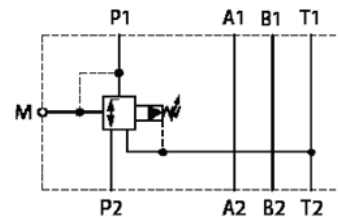
Part Number	List Price \$	Function	Pressure Range	Max Recommended Flow Rate	Regulated Line Flow Rate	Max Nominal Pressure
AM5-RP-A-6.3/10	1210.00	Pressure reducing in A	5-70 bar	100 lpm	80 lpm	320 bar
AM5-RP-B-6.3/10	1210.00	Pressure reducing in B				
AM5-RP-P-6.3/10	896.00	Pressure reducing in P				
AM5-RP-A-20/10	1210.00	Pressure reducing in A	16-210 bar			
AM5-RP-B-20/10	1210.00	Pressure reducing in B				
AM5-RP-P-20/10	896.00	Pressure reducing in P				



AM5-RP-A



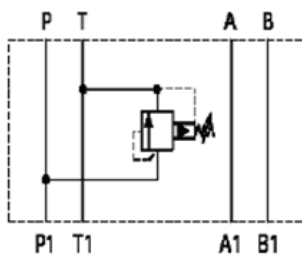
AM5-RP-B



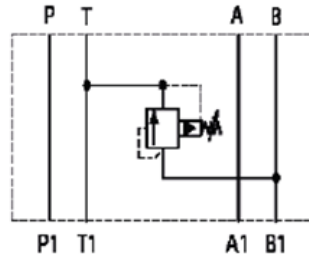
AM5-RP-P

Pilot Operated Pressure Relief Subplates

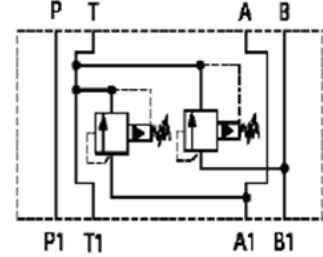
Part Number	List Price \$	Function	Pressure Range	Max Recommended Flow Rate	Max Nominal Pressure
AM5-MP-P-6.3/10	630.00	Pilot operated relief on P	10-70 bar	100 lpm	320 bar
AM5-MP-A-6.3/10	660.00	Pilot operated relief on A			
AM5-MP-BA-6.3-6.3/10	990.00	Pilot operated relief on A & B			
AM5-MP-P-12.5/10	630.00	Pilot operated relief on P	10-140 bar		
AM5-MP-A-12.5/10	660.00	Pilot operated relief on A			
AM5-MP-BA-12.5/10	990.00	Pilot operated relief on A & B			
AM5-MP-P-20/10	630.00	Pilot operated relief on P	20-210 bar		
AM5-MP-A-20/10	660.00	Pilot operated relief on A			
AM5-MP-BA-20-20/10	990.00	Pilot operated relief on A & B			
AM5-MP-P-32/10	630.00	Pilot operated relief on P	20-320 bar		
AM5-MP-A-32/10	660.00	Pilot operated relief on A			
AM5-MP-BA-32-32/10	990.00	Pilot operated relief on A & B			



AM5-MP-P



AM5-MP-A



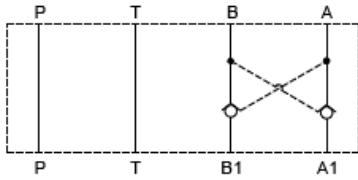
AM5-MP-BA

Bolt kit required
See options on page 95

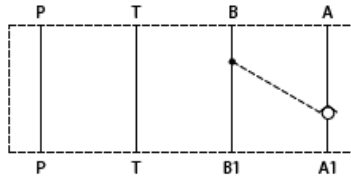


Pilot Check Subplates (steel body)

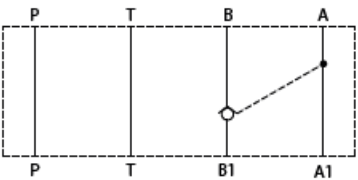
Part Number	List Price \$	Max Pressure	Function
Z2DS10-10	258.00	250 bar	Pilot check on A & B
Z2DS10A-10	247.00		Pilot check on A
Z2DS10B-10	247.00		Pilot check on B



Z2DS10-10



Z2DS10A-10

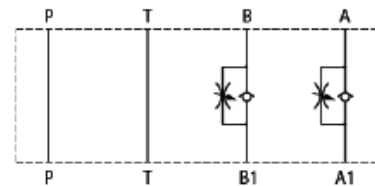


Z2DS10B-10

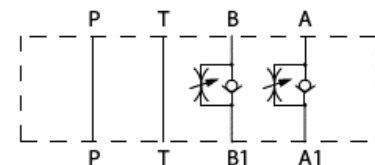


Flow Control Subplates (steel body)

Part Number	List Price \$	Max Pressure	Function
Z2FDS1030-S	288.00	250 bar	Flow control on A & B, meter in
Z2FDS1030-S2	288.00		Flow control on A & B, meter out



Z2FDS1030-S2



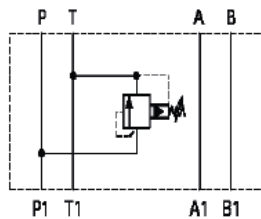
Z2FDS1030-S

CETOP VALVES, SUBPLATES & MANIFOLDS

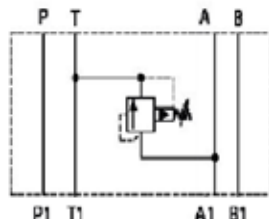
Cetop 5 Subplates

Relief Subplates (steel body)

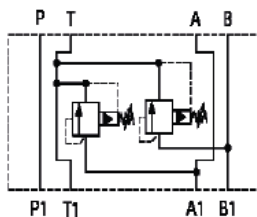
Part Number	List Price \$	Max Pressure	Function
Z2PB10VP-1-315	258.00	250 bar	Relief on P, 70-250 bar
Z2PB10VA-1-315	258.00		Relief on A, 70-250 bar
Z2PB10VB-1-315	258.00		Relief on B, 70-250 bar
Z2PB10VC-1-315	309.00		Relief on A & B, 70-250 bar



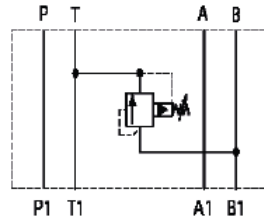
P



A



A & B

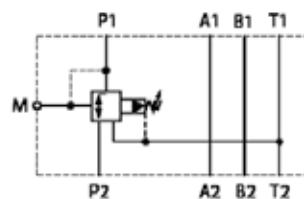


B

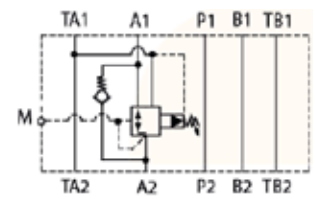


Pressure Reducing Subplates (steel body)

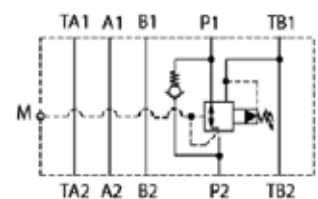
Part Number	List Price \$	Max Pressure	Function
ZPR10DP2-30-210-Y-M	309.00	250 bar	Pressure reducing in P, 70-250 bar
ZPR10DA2-30-210-Y-M	309.00		Pressure reducing in A, 70-250 bar
ZPR10DB2-30-210-Y-M	309.00		Pressure reducing in B, 70-250 bar



ZPR10DP2



ZPR10DA2



ZPR10DB2

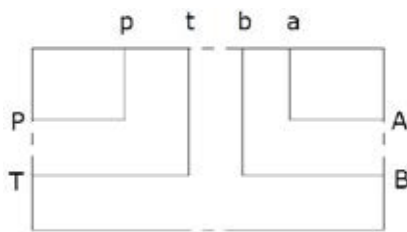


Cetop 3: 1 Station Subplates

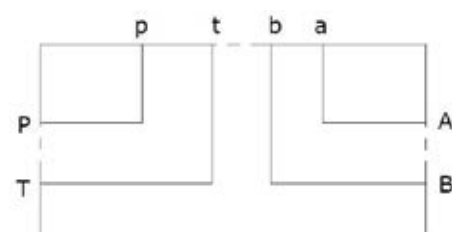
Part Number	List Price \$	Relief Bar	Port Position A/B/P/T	Port Size	Unloader Cavity	Gauge Port	Nominal Flow	Maximum Flow	Material
EA06-07-38	118.00	n/a	Rear	3/8" BSPP	n/a	n/a	30 lpm	70 lpm	Aluminium
ES06-07-38	144.00								Steel
ES06-09-38	180.00								
EA06-09-38	139.00		Aluminium						
EA06-08-38	155.00								Side parallel



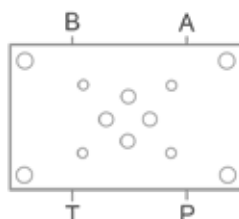
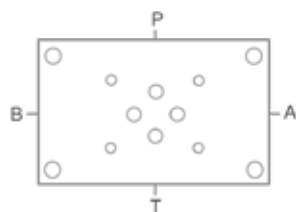
EA06-07-38 / ES06-07-38



EA06-09-38 / ES06-09-38

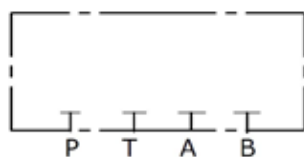


EA06-8-38



Cetop 3 Subplates

Part Number	List Price \$	Description	Material
ES06-00-10	72.00	Cetop 3 blanking plate	Steel
ES06-00-20-3	124.00	Cetop 3 crossover plate P-B T-A	
ES06-01-14-1	124.00	Cetop 3 subplate A + B ports 1/4" BSPP	
ES06-01-14-4	124.00	Cetop 3 subplate P + T ports 1/4" BSPP	



ES06-00-10



ES06-01-14-1



ES06-01-14-4

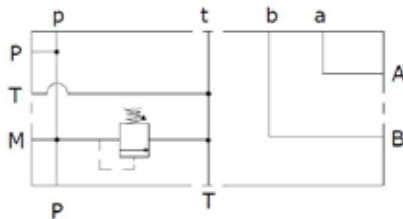


ES06-00-20-3

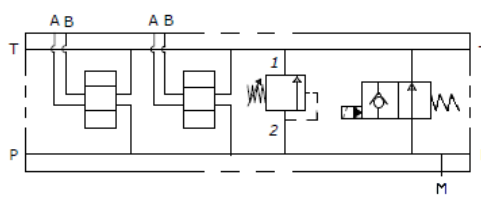


Cetop 3 Manifolds (1/2" BSPP Ports P+T)

Part Number	List Price \$	Stations	Relief Bar	A-B	P-T	Unloader Cavity	Gauge Port	Nominal Flow	Maximum Flow	Material
EA-06-10-38-1-3-H	268.00	1	50-220 (M20)	3/8" BSPP	3/8"	n/a	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-14-38-2-4-3-H	453.00	2			1/2" BSPP					
EA06-14-38-3-4-3-H	556.00	3								
EA06-14-38-4-4-3-H	649.00	4								
EA06-14-38-5-4-3-H	716.00	5								
EA06-14-38-6-4-3-H	814.00	6								
EA06-14-38-7-4-3-H	917.00	7								
EA06-14-38-8-4-3-H	1056.00	8								



EA06-10-38-1-3-H



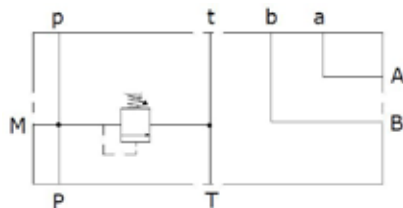
EA06-14-38-x-4-3-H-000-N



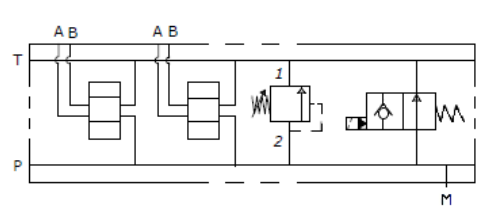
Relief options on page 116

Cetop 3 High Flow Manifolds (3/4" BSPP Ports P+T)

Part Number	List Price \$	Stations	Relief Bar	A-B	P-T	Unloader Cavity	Gauge Port	Flow	Material
EA06-10-12-1-3-H	268.00	1	20-215	1/2” BSPP	1/2”	n/a	1/4” BSPP	80 lpm	Aluminium
EA06-28-12-2-4-3-H	623.00	2	10-240 (SAE10-2)		3/4” BSPP	Yes (SAE10-2)			
EA06-28-12-3-4-3-H	726.00	3							
EA06-28-12-4-4-3-H	845.00	4							
EA06-28-12-5-4-3-H	948.00	5							
EA06-28-12-6-4-3-H	1061.00	6							



EA06-10-12-1-3-H



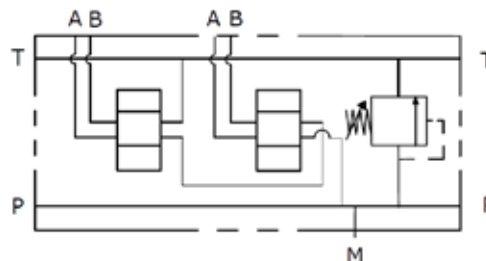
EA06-28-12-x-4-3-H-000-N





Cetop 3 Series Manifolds (1/2" BSPP Ports P+T)

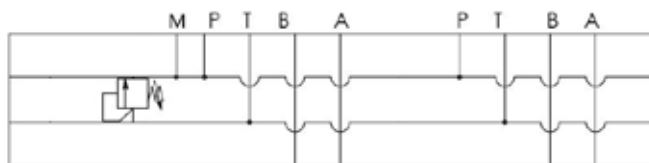
Part Number	List Price \$	Stations	Relief Bar	A-B	P-T	Unloader Cavity	Gauge Port	Nominal Flow	Maximum Flow	Material
EA06-19-38-2-1-3-H	520.00	2	50-215	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-19-38-3-1-3-H	645.00	3								
EA06-19-38-4-1-3-H	780.00	4								



Relief options on page 116

Cetop 3 Manifolds

Part Number	List Price \$	Stations	P-T	A-B	Relief	Material
BPT3A	124.00	P & T Block Only	3/8" BSPP		SAE8-2 (see page 116)	Aluminium
BS3C2	185.00	1	1/2" BSPP	3/8" BSPP	20-210 bar (10-90 bar also available on request)	
BM2AC2	309.00	2				
BM3AC2	371.00	3				
BM4AC2	391.00	4				
BM5AC2	515.00	5				
BM6AC2	536.00	6				



Relief options on page 116

Cetop 5 Manifolds

Part Number	List Price \$	Stations	P-T-A-B	Relief	Material
BPT5A	206.00	P & T Block Only	3/4" BSPP	SAE10-2 (see page 116)	Aluminium
BS5C2	247.00	1		20-210 bar	



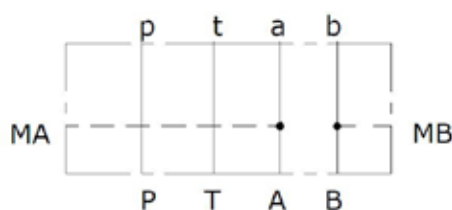
BPT5A



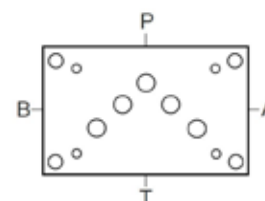
BS5C2

Cetop 5: 1 Station Subplates

Part Number	List Price \$	Relief Bar	Port Position A/B/P/T	Port Size P-T-A-B	Unloader Cavity	Gauge Port	Flow	Relief Cavity	Material
EA10-02-34	175.00	n/a	Side	3/4" BSPP	n/a	n/a	80 lpm	n/a	Aluminium
ES10-02-34	304.00								Steel
ES10-01-34	258.00		Rear						

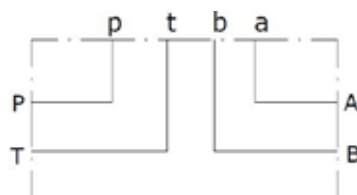


ES10-01-34



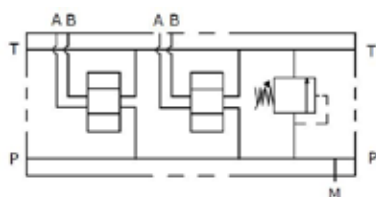
EA10-02-34 / ES10-02-34

Relief options on page 116

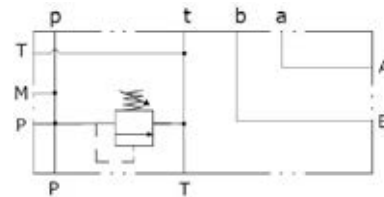


Cetop 5 Manifolds

Part Number	List Price \$	Stations	Relief Bar	A-B	P-T	Unloader Cavity	Gauge Port	Flow	Material
EA10-09-34-1-3-H	494.00	1	70-250 (M26)	3/4"	3/4" BSPP	No	1/4" BSPP	80 lpm	Aluminium
EA10-06-34-2-1-3-H	530.00	2		1/2" BSPP					
EA10-06-34-3-1-3-H	639.00	3							
EA10-06-34-4-1-3-H	809.00	4							
EA10-06-34-5-1-3-H	1087.00	5							
EA10-06-34-6-1-3-H	1324.00	6							



EA10-06-34-x-1-3-H



EA10-09-34-1-3-H

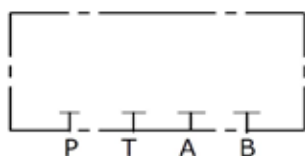
Cetop 5-3 Subplate

Part Number	List Price \$	Description
EA610-05-0	134.00	Cetop 5 to 3 reducing subplate (aluminium)

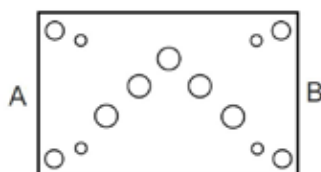


Cetop 5 Subplates

Part Number	List Price \$	Description
ES10-00-10	98.00	Cetop 5 blanking plate (steel)
ES10-00-20-3	149.00	Cetop 5 crossover plate P-B T-A (steel)
ES10-01-14-1	144.00	Cetop 5 subplate A + B ports 1/4" BSPP (steel)
ES10-01-14-4	144.00	Cetop 5 subplate P + T ports 1/4" BSPP (steel)



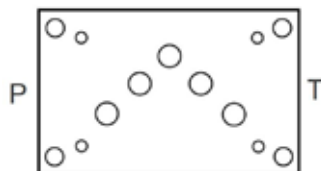
ES10-00-10



ES10-01-14-1



ES10-00-20-3

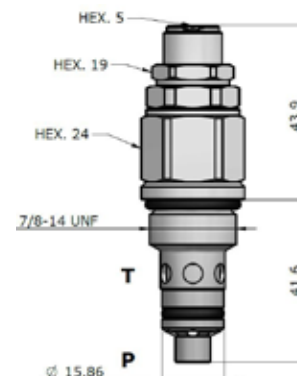
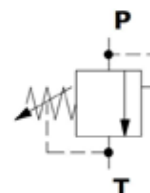


ES10-01-14-4



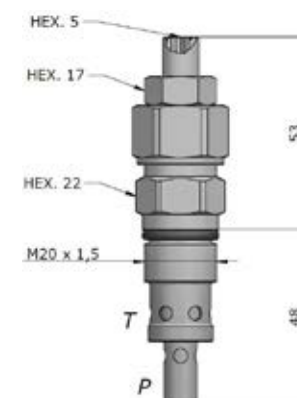
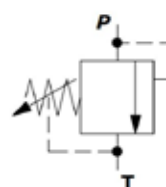
SAE-10 Relief Cartridges

Part Number	List Price \$	Size	Pressure Range	Flow
DRV-S10-02-110-N-H	124.00	SAE10-2	5-110 bar	80 lpm
DRV-S10-02-240-N-H	124.00		10-240 bar	
DRV-S10-02-350-N-H	124.00		50-350 bar	
CPS-10	50.00	Steel blanking plug, SAE10-2 cavity		



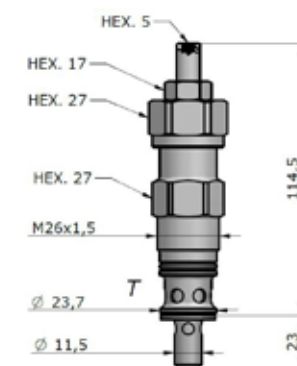
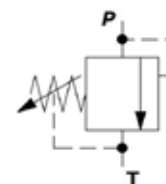
M20 Relief Cartridges

Part Number	List Price \$	Thread	Pressure Range	Flow
DRV-M20-02-055-N-H	93.00	M20	5-55 bar	30 lpm
DRV-M20-02-110-N-H	93.00		25-110 bar	
DRV-M20-02-215-N-H	93.00		50-215 bar	
DRV-M20-02-350-N-H	93.00		100-350 bar	
CPS-M20	21.00	Steel blanking plug, M20 cavity		



M26 Relief Cartridges

Part Number	List Price \$	Thread	Pressure Range	Flow
DRV-M26-01-055-N-H	124.00	M26	5-55 bar	80 lpm
DRV-M26-01-110-N-H	124.00		25-110 bar	
DRV-M26-01-250-N-H	124.00		75-250 bar	
CPS-M26	30.00	Steel blanking plug, M26 cavity		



Vivoil Group 0 Pumps		118
Vivoil Group 1 Pumps		120
Vivoil Group 2 Pumps		124
Vivoil Group 3 Pumps		130
Multiple Pump Nomenclature		134
Group 1 Pumps		136
Group 2 Pumps		137
Group 3 Pumps		139
Log Splitter Pumps		141
Vivoil Group 1 Gear Motors		142
Vivoil Group 2 Gear Motors		145
Vivoil Group 3 Gear Motors		148
Vivoil Gear Flow Dividers		152
Gear Flow Dividers		154

PREMIUM ITALIAN PRODUCT 

ORDER CODE FOR VIVOIL GROUP 0 PUMPS

Series	Group	Pump	Displace- ment	Flange	Shaft	Inlet Port	Outlet Port	Rear Cover
X	O	P	05	02	A	B	B	A

Displacement	
0.17cc	01
0.25cc	02
0.45cc	04
0.57cc	05
0.76cc	06
0.98cc	07
1.27cc	09
1.52cc	11
2.30cc	13

Shaft

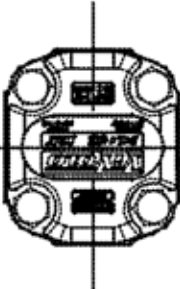
CI001 - Parallel
 $T.2 = 2.1 \text{ [Nm]}$

A

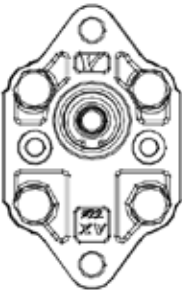
Technical drawing of a shaft assembly. The shaft has a diameter of $\varnothing 7$ mm and a length of 21 mm (M7 x 1). The pulley has a diameter of $\varnothing 7$ mm and a width of 8 mm. The gear has a diameter of $\varnothing 7$ mm and a width of 8 mm. The shaft is supported by bearings with a diameter of 5 mm. The drawing is labeled 'Shaft' and 'A'.

Parallel $\varnothing 7$ mm M7x1 - Key 2mm

Rear Cover



A

Flange	
LEFT ROTATION 	01
RIGHT ROTATION 	02

Ports	Inlet	Outlet
0.17cc	B	B
0.25cc	B	B
0.45cc	B	B
0.57cc	B	B
0.76cc	B	B
0.98cc	B	B
1.27cc	B	B
1.52cc	B	B
2.30cc	B	B
B = 1/4" BSPP		

Group 0 DIN Mount, M7x1 keyed shaft

Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B	C	
			Working	Peak							
XOP0102ABBA	336.00	0.17	220	260	700/9000	1/4" BSPP	1/4" BSPP	55.8	26.2	46.8	
XOP0202ABBA	336.00	0.25		280				700/6000	56.4	26.5	47.4
XOP0402ABBA	336.00	0.45							58.0	27.3	49.0
XOP0502ABBA	336.00	0.57							59.0	27.8	50.0
XOP0602ABBA	336.00	0.76			60.5				28.5	51.5	
XOP0702ABBA	336.00	0.98			62.0				29.3	53.0	
XOP0902ABBA	371.00	1.27		64.5	30.5			55.5			
XOP1102ABBA	371.00	1.52		66.5	31.5			57.5			
XOP1302ABBA	371.00	2.30		190	210			700/5000	72.5	34.5	63.5

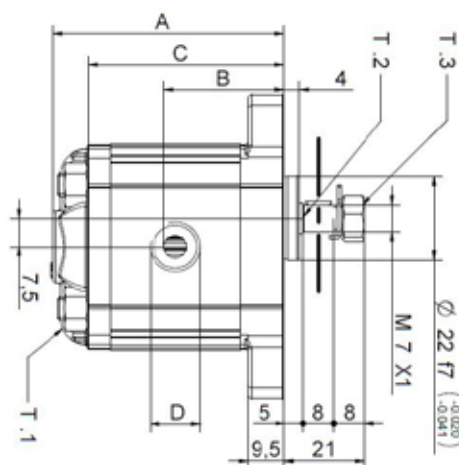
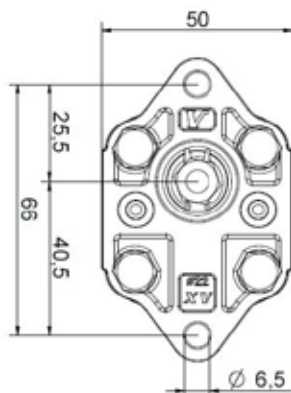
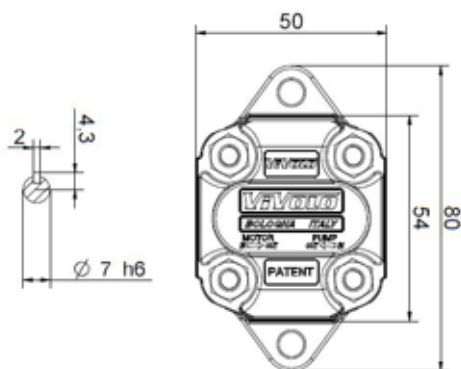


Seal Kit

Part Number	List Price \$	Material
8KGXOP1.A	41.00	NBR

Available as standard
rotation CW or CCW

Compatible with Group 0, 1,
2, 3 tandem pumps



ORDER CODE FOR VIVOIL GROUP 1 PUMPS

Note: Additional costs apply
for non-standard options

Series	Group	Pump	Displacement	Flange	Shaft	Inlet Port	Outlet Port	Rear Cover
X	1	P	27	01	F	B	B	A

Displacement	
0.9cc	16
1.2cc	17
1.7cc	18
2.2cc	20
2.6cc	21
3.2cc	23
3.8cc	25
4.3cc	27
4.9cc	29
5.9cc	31
6.5cc	32
7.8cc	34
9.8cc	36

Shaft	
CO001 - Tapered T.2 = 43 [Nm] Tapered 1:8 Ø 10mm - M7x1 Key 2.4mm	F
CI002 - Parallel T.2 = 32.8 [Nm] Parallel Ø 1/2" - Key 3.2mm	B

Flange	
LEFT ROTATION	
DIN Group 1	01
SAE-AA	61
RIGHT ROTATION	
DIN Group 1	02
SAE-AA	62

Ports	Inlet	Outlet
0.9cc	B	B
1.2cc	B	B
1.7cc	B	B
2.2cc	B	B
2.6cc	B	B
3.2cc	B	B
3.8cc	B	B
4.3cc	B	B
4.9cc	B	B
5.9cc	B	B
6.5cc	B	B
7.8cc	B	B
9.8cc	B	B
B = 3/8" BSPP		

Rear Cover	
	A
	D
	N01 10-105 bar
	N02 70-210 bar
	N03 140-350 bar

RELIEF VALVE PRICING - PAGE 121

(WITH RELIEF VALVE)

NEW Group 1 Rear Cover With Integrated Relief Valve

Order Code	List Price \$	Relief Range		Max Flow Rate
		Min	Max	
N-01	255.00	10 bar	105 bar	50 lpm
N-02	255.00	70 bar	210 bar	
N-03	255.00	140 bar	350 bar	



Note: Pricing for rear cover with integrated relief valve is in addition to standard pump price

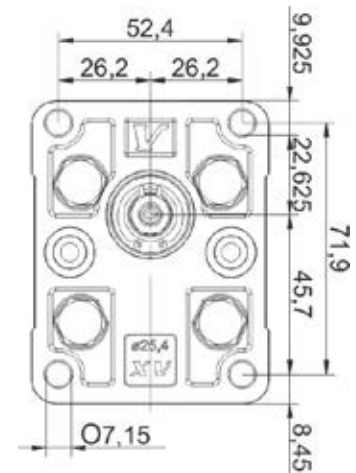
Group 1 DIN Mount, 1:8 Tapered Shaft

Part Number	List Price \$	CC	Max Pressure bar Working	Peak	Max/Min Speed	Port S	Port P	A	B mm	C
X1P1602FBBA	366.00	0.9	240	280	6000/700	3/8” BSPP	3/8” BSPP	78.1	37.3	66.1
X1P1702FBBA	366.00	1.2	250	290				79.0	37.8	67.0
X1P1802FBBA	366.00	1.7						80.5	38.5	68.5
X1P2002FBBA	366.00	2.2						82.5	39.5	70.5
X1P2102FBBA	366.00	2.6		300				84.5	40.5	72.5
X1P2302FBBA	366.00	3.2						86.5	41.5	74.5
X1P2502FBBA	366.00	3.8						88.5	42.5	76.5
X1P2702FBBA	366.00	4.3						90.5	43.5	78.5
X1P2902FBBA	391.00	4.9						93.5	45.0	81.5
X1P3102FBBA	391.00	5.9		5000/700	97.0			46.8	85.0	
X1P3202FBBA	391.00	6.5			98.5			48.0	86.5	
X1P3402FBBA	391.00	7.8	220		260			103.5	50.0	91.5
X1P3602FBBA	391.00	9.8	190	230	4000/700			112.5	54.5	100.5

Available as standard
rotation CW or CCW

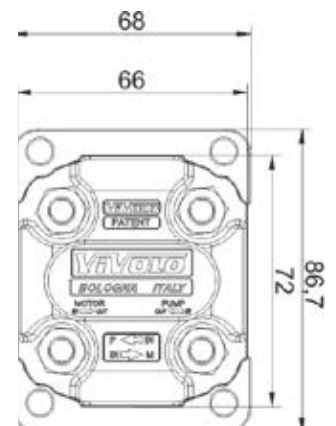
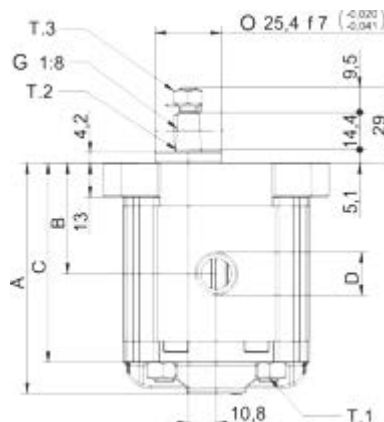
Also available - relief valve
option, tandem pumps

Available with SAE A-2 bolt
with keyed shaft



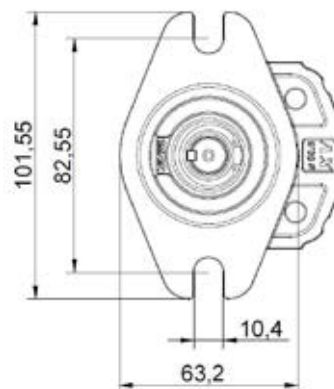
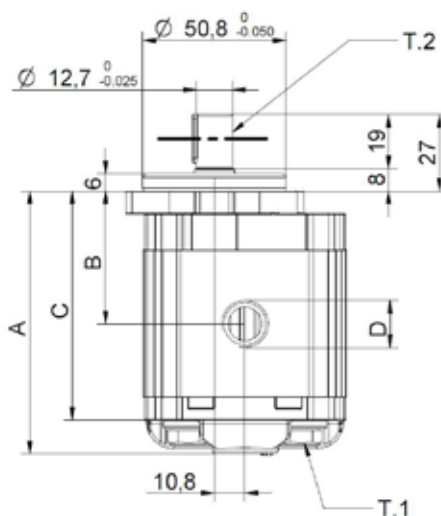
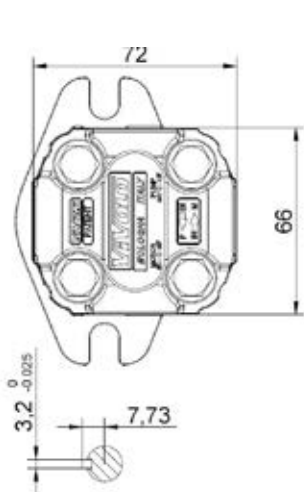
Seal Kit

Part Number	List Price \$	Material
8KGX1P1.A	36.00	NBR
8KGX1P1.V	113.00	Viton



Group 1 SAE AA Mount, 1/2" Keyed Shaft

Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B	C
			Working	Peak						
X1P1662BBBA	366.00	0.9	240	280	6000/700	3/8” BSPP	3/8” BSPP	82.6	41.8	70.6
X1P1762BBBA	366.00	1.2	250	290				83.5	42.3	71.5
X1P1862BBBA	366.00	1.7						85.0	43.0	73.0
X1P2062BBBA	366.00	2.2						87.0	44.0	75.0
X1P2162BBBA	366.00	2.6						89.0	45.0	77.0
X1P2362BBBA	366.00	3.2		91.0				46.5	79.0	
X1P2562BBBA	366.00	3.8		300				93.0	47.0	81.0
X1P2762BBBA	366.00	4.3						95.0	48.0	83.0
X1P2962BBBA	391.00	4.9						98.0	49.5	86.0
X1P3162BBBA	391.00	5.9	101.5					51.3	89.5	
X1P3262BBBA	391.00	6.5	5000/700	105.0	52.5			93.0		
X1P3462BBBA	391.00	7.8		220	260			108.0	54.5	96.0
X1P3662BBBA	391.00	9.8		190	230			4000/700	117.0	59.0



Seal Kit

Part Number	List Price \$	Material
8KGX1P2.A	36.00	NBR
8KGX1P2.V	129.00	Viton



ORDER CODE FOR VIVOIL GROUP 2 PUMPS

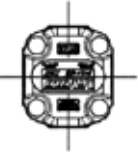
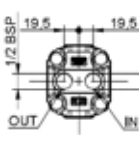
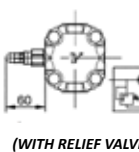
**Note: Additional costs apply
for non-standard options**

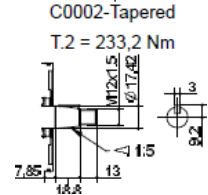
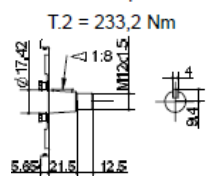
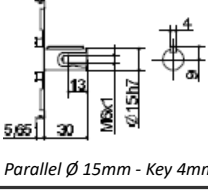
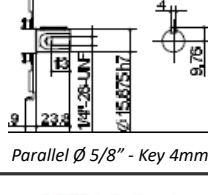
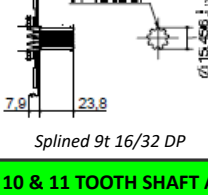
Series	Group	Pump	Displacement	Flange	Shaft	Inlet Port	Outlet Port	Rear Cover
X	2	P	51	02	E	C	B	A

Displacement	
4.2cc	41
6.0cc	43
8.4cc	45
10.8cc	47
14.4cc	49
16.8cc	51
19.2cc	53
22.8cc	55
26.2cc	57
30.0cc	59
34.2cc	61
39.6cc	63

Ports	Inlet	Outlet
4.2cc	B	B
6.0cc	B	B
8.4cc	C	B
10.8cc	C	B
14.4cc	C	B
16.8cc	D	C
19.2cc	D	C
22.8cc	D	C
26.2cc	D	C
30.0cc	D	C
34.2cc	D	C
39.6cc	D	C
B = 1/2" BSPP		
C = 3/4" BSPP		
D = 1" BSPP		

Flange			
LEFT ROTATION		RIGHT ROTATION	
	01		02
DIN Group 2		DIN Group 2	
	51		52
SAE-A		SAE-A	
	41		42
Ø80 German Standardized		Ø80 German Standardized	
	21		22
Ø50 HY German Standardized		Ø50 HY German Standardized	

Rear Cover			
			
A	D	(WITH RELIEF VALVE)	
		N01 10-105 bar	
		N02 70-210 bar	
		N03 140-350 bar	
RELIEF VALVES & PRIORITY HEADS - SEE PAGE 125			

Shaft	
 C0002-Tapered T.2 = 233,2 Nm Tapered 1:5 Ø 17.4mm M12x1.5 - Key 3mm GERMAN STANDARDIZED ONLY	F
 C0001-Tapered T.2 = 233,2 Nm Tapered 1:8 Ø 17.2mm M12x1.5 - Key 4mm	E
 CI001-Parallel T.2 = 44,1 Nm Parallel Ø 15mm - Key 4mm	A
 CI002-Parallel T.2 = 67,5 Nm Parallel Ø 5/8" - Key 4mm	B
 SCF04-Splined T.2 = 104,6 Nm SAE J 498 9T 16/32 DP Splined 9t 16/32 DP	I
10 & 11 TOOTH SHAFT AVAILABLE SEE PAGE 129	

NEW Group 2 Rear Cover With Integrated Relief Valve

Order Code	List Price \$	Flow Adjustment		Max Flow Rate
		Min	Max	
N-01	310.00	10 bar	105 bar	50 lpm
N-02	310.00	70 bar	210 bar	
N-03	310.00	140 bar	350 bar	

NOTE:

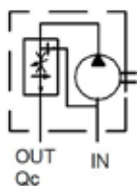
Pricing for rear covers with integrated relief valve and rear covers with priority head is in addition to standard pump price.



NEW Priority Head Internal Excess Flow

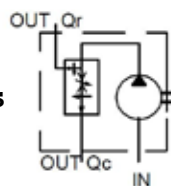
Rear Cover Part Number	List Price \$	Flow Adjustment		QC Port
		Min	Max	
CB62	620.00	3 lpm	6 lpm	3/8" BSPP
CB58	620.00	6 lpm	11 lpm	
CB63	620.00	8 lpm	16 lpm	
CB64	620.00	13 lpm	25 lpm	
CB70	620.00	25 lpm	45 lpm	

CB Series



Qc = ADJUSTABLE CONSTANT FLOW

CA Series



Qc = ADJUSTABLE CONSTANT FLOW
Qr = EXCEEDING FLOW

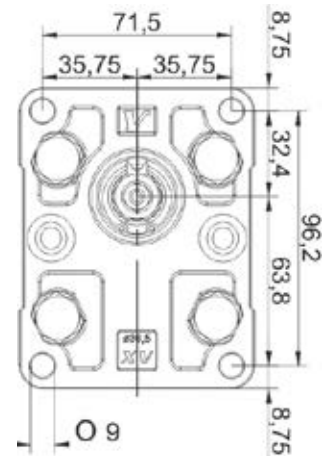


NEW Priority Head External Excess Flow

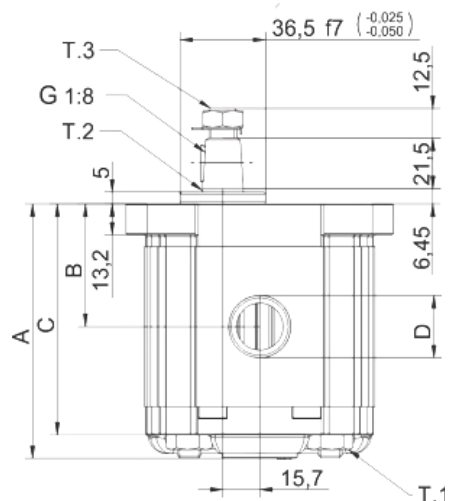
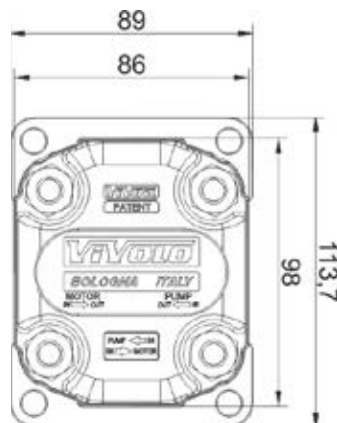
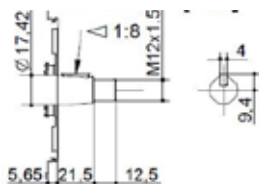
Rear Cover Part Number	List Price \$	Flow Adjustment		QR Port	QC Port
		Min	Max		
CA62	640.00	3 lpm	6 lpm	3/8" BSPP	3/8" BSPP
CA58	640.00	6 lpm	11 lpm		
CA63	640.00	8 lpm	16 lpm		
CA64	640.00	13 lpm	25 lpm		
CA70	640.00	25 lpm	45 lpm		

Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B mm	C
			Working	Peak						
X2P4102EBBA	489.00	4.2	260	300	3500/700	1/2" BSPP	1/2" BSPP	87.2	41.7	77.2
X2P4302EBBA	489.00	6.0				90.2		43.2	80.2	
X2P4502ECBA	489.00	8.4				94.2		45.2	84.2	
X2P4702ECBA	490.00	10.8				98.2		47.2	88.2	
X2P4902ECBA	505.00	14.4	250	290		104.2		50.2	94.2	
X2P5102EDCA	505.00	16.8	230	270	3000/700	1" BSPP	3/4" BSPP	108.2	52.2	98.2
X2P5302EDCA	515.00	19.2	210	250				112.2	54.2	102.2
X2P5502EDCA	515.00	22.8	200	240				118.2	57.2	108.2
X2P5702EDCA	515.00	26.2	170	210				122.2	59.2	112.2
X2P5902EDCA	577.00	30.0	160	200	2500/700			130.2	63.2	120.2
X2P6102EDCA	577.00	34.2	150	190				137.2	66.7	127.2
X2P6302EDCA	577.00	39.6	140	180				146.2	71.2	136.2

A detailed view of a yellow and silver industrial solenoid valve. The valve has a square base with mounting holes and a central threaded outlet. A yellow solenoid coil is wrapped around the side of the valve body.



Part Number	List Price \$	Material
8KGX2P1.A	68.00	NBR
8KGX2P1.V	139.00	Viton



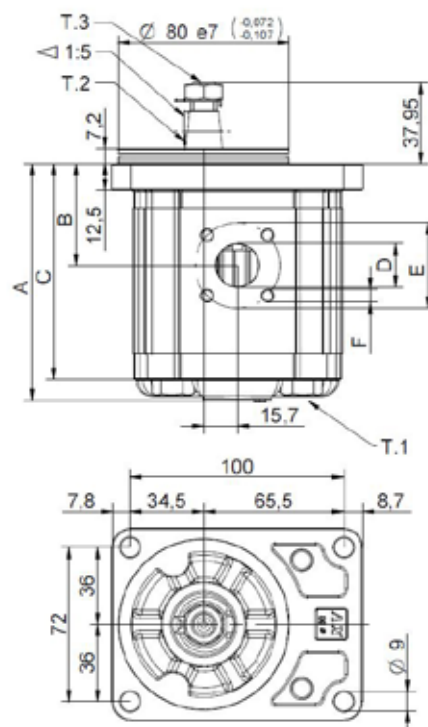
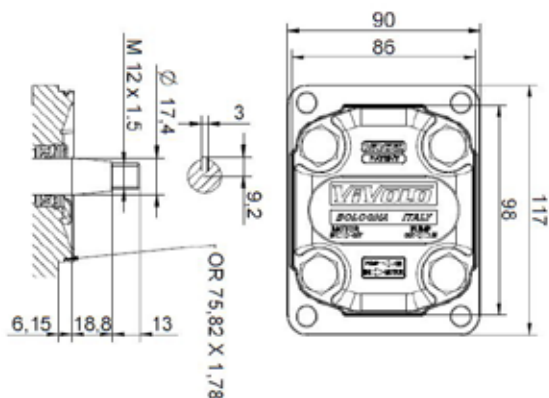
Group 2 Standard German Mount 1:5 Taper Shaft

Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B mm	C
			Working	Peak						
X2P4142FBBA	592.00	4.2	260	300	3500/700	1/2" BSPP	1/2" BSPP	89.7	41.1	79.7
X2P4342FBBA	592.00	6.0				92.7		41.1	82.7	
X2P4542FCBA	592.00	8.4				96.7		43.1	86.7	
X2P4742FCBA	608.00	10.8				100.7		47.5	90.7	
X2P4942FCBA	608.00	14.4	250	290	3000/700	1" BSPP	3/4" BSPP	106.7	47.5	96.7
X2P5142FDCA	608.00	16.8	230	270				110.7	47.5	100.7
X2P5342FDCA	618.00	19.2	210	250				114.7	47.5	104.7
X2P5542FDCA	618.00	22.8	200	240				120.7	55.0	110.7
X2P5742FDCA	618.00	26.2	170	210	2500/700			124.7	55.0	114.7
X2P5942FDCA	680.00	30.0	160	200				132.7	63.2	122.7
X2P6142FDCA	680.00	34.2	150	190				139.7	63.2	129.7
X2P6342FDCA	680.00	39.6	140	180				148.7	63.2	138.7



Available as standard
rotation CW or CCW

Priority Heads now
available, see page 125



Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B mm	C
			Working	Peak						
X2P4152BBBA	489.00	4.2	260	300	3500/700	1/2" BSPP	1/2" BSPP	88.0	39.4	78.0
X2P4352BBBA	489.00	6.0				91.0		39.4	81.0	
X2P4552BCBA	489.00	8.4				95.0		41.4	85.0	
X2P4752BCBA	505.00	10.8				99.0		45.8	89.0	
X2P4952BCBA	505.00	14.4	250	290		105.0		45.8	95.0	
X2P5152BDCA	505.00	16.8	230	270	3000/700	1" BSPP	3/4" BSPP	109.0	45.8	99.0
X2P5352BDCA	515.00	19.2	210	250				113.0	45.8	103.0
X2P5552BDCA	515.00	22.8	200	240				119.0	53.3	109.0
X2P5752BDCA	515.00	26.2	170	210				123.0	53.3	113.0
X2P5952BDCA	577.00	30.0	160	200				131.0	61.5	121.0
X2P6152BDCA	577.00	34.2	150	190				138.0	61.5	128.0
X2P6352BDCA	577.00	39.6	140	180				2000/700	147.0	61.5

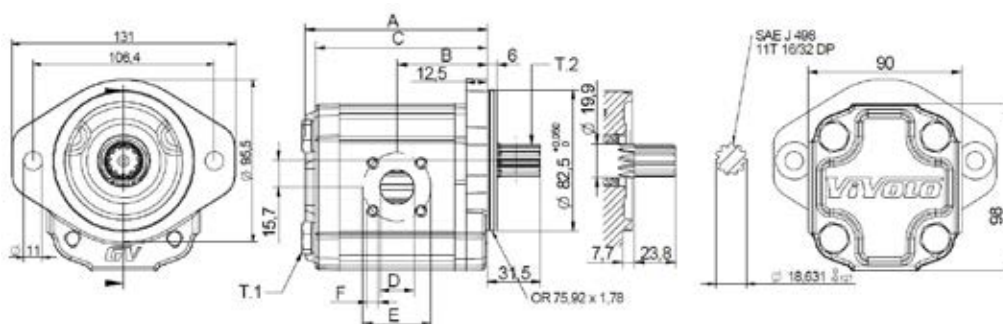


Group 2 SAE A Mount, 5/8" 9 Tooth Splined Shaft

Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B mm	C
			Working	Peak						
X2P4152IBBA	489.00	4.2	260	300	3500/700	1/2" BSPP	1/2" BSPP	88.0	39.4	78.0
X2P4352IBBA	489.00	6.0				91.0		39.4	81.0	
X2P4552ICBA	489.00	8.4				95.0		41.4	85.0	
X2P4752ICBA	505.00	10.8				99.0		45.8	89.0	
X2P4952ICBA	505.00	14.4	250	290		105.0		45.8	95.0	
X2P5152IDCA	505.00	16.8	230	270		109.0	45.8	99.0		
X2P5352IDCA	515.00	19.2	210	250	3000/700	1" BSPP	3/4" BSPP	113.0	45.8	103.0
X2P5552IDCA	515.00	22.8	200	240				119.0	53.3	109.0
X2P5752IDCA	515.00	26.2	170	210				123.0	53.3	113.0
X2P5952IDCA	577.00	30.0	160	200	2500/700			131.0	61.5	121.0
X2P6152IDCA	577.00	34.2	150	190				138.0	61.5	128.0
X2P6352IDCA	577.00	39.6	140	180				2000/700	147.0	61.5

NEW Group 2 SAE A Mount, 11 Tooth Shaft (Cast Iron)

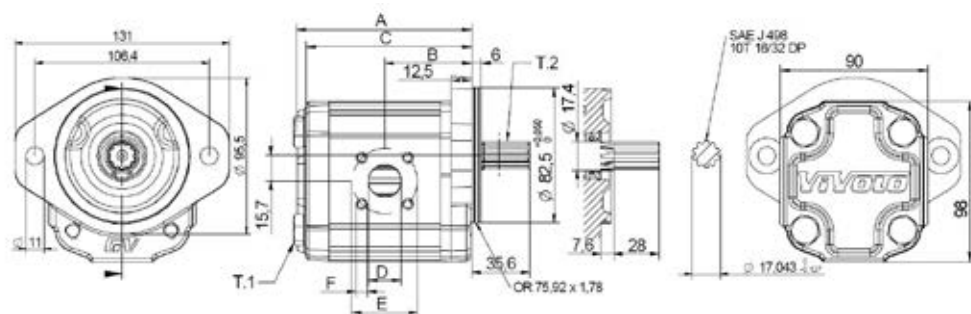
Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B mm	C
			Working	Peak						
G2P4152SBBA	762.00	4.2	260	300	700/3500	1/2" BSPP	1/2" BSPP	86	42.5	80
G2P4352SCBA	762.00	6.0				89		44	83	
G2P4552SCBA	762.00	8.4				93		46	87	
G2P4752SCBA	762.00	10.8				97		48	91	
G2P4952SCBA	796.00	14.4	250	290		103	51	97		
G2P5152SCBA	796.00	16.8	230	270		107	53	101		
G2P5352SDCA	826.00	19.2	210	250	700/3000	1" BSPP	3/4" BSPP	111	55	105
G2P5552SDCA	826.00	22.8	200	240				117	58	111
G2P5752SDCA	826.00	26.2	170	210				121	60	115



Priority Heads now
available, see page 125

NEW Group 2 SAE A Mount, 10 Tooth Shaft (Cast Iron)

Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B	C
			Working	Peak						
G2P5152RDCA	796.00	16.8	230	230	700/3500	1" BSPP	3/4" BSPP	107	53	101
G2P5552RDCA	826.00	22.8	200	220	700/3000			117	58	111
G2P5752RDCA	826.00	26.2	170	190				121	60	115
G2P5952RDCA	886.00	30.0	160	180	700/2500			129	64	123
G2P6152RDCA	886.00	34.2	150	170				136	67.5	130

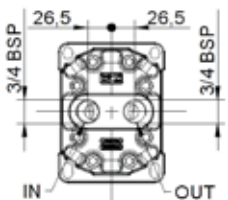


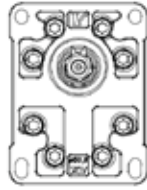
ORDER CODE FOR VIVOIL GROUP 3 PUMPS

Note: Additional costs apply
for non-standard options

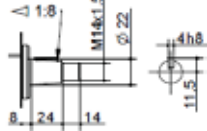
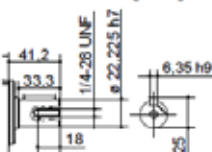
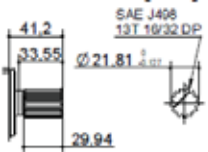
Series	Group	Pump	Displacement	Flange	Shaft	Inlet Port	Outlet Port	Rear Cover
X	3	P	66	32	I	D	D	A

Displacement	
14.9cc	66
17.4cc	68
21.1cc	70
27.0cc	72
32.3cc	74
38.5cc	78
43.4cc	79
47.2cc	80
50.9cc	81
54.6cc	82
60.8cc	83
64.5cc	85
70.7cc	86
74.5cc	87
86.9cc	89

Rear Cover	
	A
	D

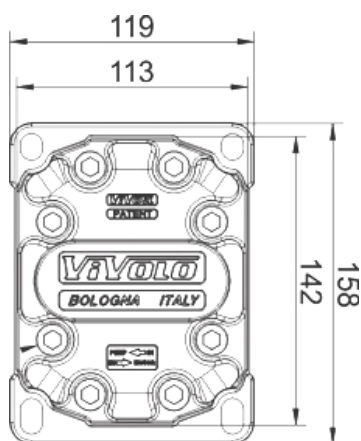
Flange	
LEFT ROTATION  DIN Group 3	01
 SAE-B	31
RIGHT ROTATION  DIN Group 3	02
 SAE-B	32

Ports	Inlet	Outlet
14.9cc	D	D
17.4cc	E	D
21.1cc	E	D
27.0cc	E	D
32.3cc	E	D
38.5cc	E	D
43.4cc	F	E
47.2cc	F	E
50.9cc	F	E
54.6cc	F	E
60.8cc	F	E
64.5cc	F	E
70.7cc	F	E
74.5cc	F	F
86.9cc	F	F
D = 3/4" BSPP		
E = 1" BSPP		
F = 1.1/4" BSPP		

Shaft		
CO001 - Tapered T.2 = 482 [Nm]  Tapered 1:8 Ø 22mm - M14x1.5 Key 4mm	CI004 - Parallel T.2 = 180 [Nm]  Parallel Ø 7/8" - Key 6.35mm	SCF04 - Splined T.2 = 264 [Nm]  Splined 7/8" 13t
A	H	I

Group 3 DIN Mount, 1:8 Tapered Shaft

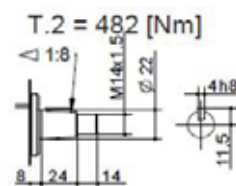
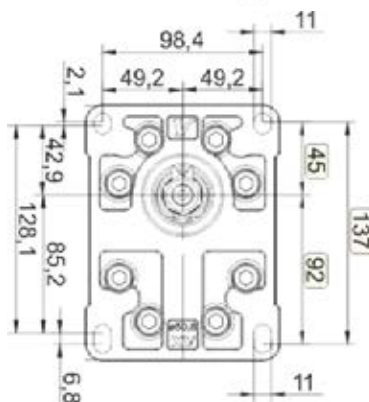
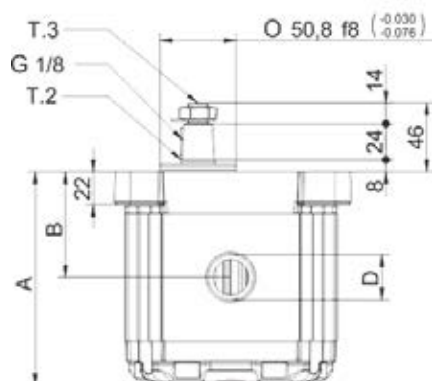
Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B
			Working	Peak				mm	
X3P6602ADDA	1015.00	14.9	300	320	3000/700	3/4" BSPP	3/4" BSPP	124	61
X3P6802AEDA	1015.00	17.4				126		62	
X3P7002AEDA	1015.00	21.1				129		63.5	
X3P7202AEDA	1015.00	27.0	250	270		1" BSPP		133	65.5
X3P7402AEDA	1015.00	32.3						138	68
X3P7802AEDA	1082.00	38.5				2800/700		1.1/4" BSPP	1" BSPP
X3P7902AFEA	1082.00	43.4			147		72.5		
X3P8002AFEA	1082.00	47.2	230	250	230	250			
X3P8102AFEA	1133.00	50.9			153	75.5			
X3P8202AFEA	1133.00	54.6			156	77			
X3P8302AFEA	1133.00	60.8			161	79.5			
X3P8502AFEA	1133.00	64.5	210	230	2300/700	1.1/4" BSPP	210	230	
X3P8602AFEA	1185.00	70.7	200	220			169	83.5	
X3P8702AFFA	1185.00	74.5	180	200			1.1/4" BSPP	172	85
X3P8902AFFA	1205.00	86.9	150	170	182	90			



Available as standard rotation CW or CCW

Also available - relief valve option, tandem pumps

Available with SAE A-2 bolt with keyed or spline shaft

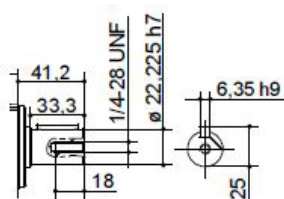
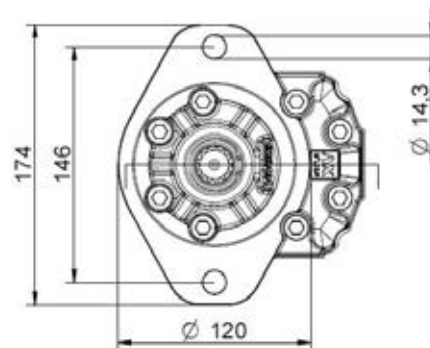
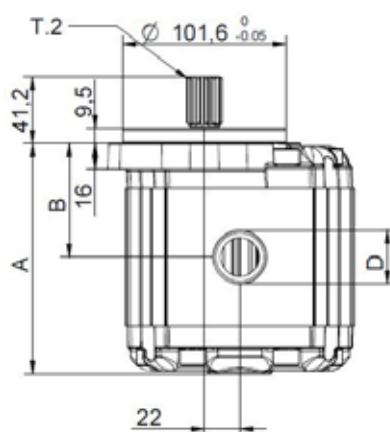
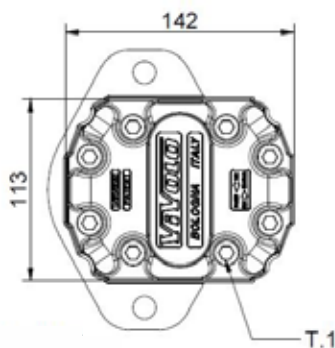


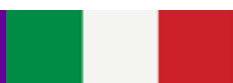
Seal Kit

Part Number	List Price \$	Material
8KGX3P1.A	118.00	NBR
8KGX3P1.V	242.00	Viton

Group 3 SAE B Mount, 7/8" Keyed Shaft

Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B
			Working	Peak				mm	
X3P7032HEDA	1015.00	21.1	280	300	3000/700	1" BSPP	3/4" BSPP	129	63.5
X3P7232HEDA	1015.00	27.0	250	270				133	65.5
X3P7432HEDA	1015.00	32.3						138	68
X3P7832HEDA	1082.00	38.5						143	70.5
X3P7932HFEA	1082.00	43.4	230	250	2800/700	1.1/4" BSPP	1" BSPP	147	72.5
X3P8032HFEA	1082.00	47.2						230	250
X3P8132HFEA	1133.00	50.9						153	75.5
X3P8232HFEA	1133.00	54.6			156			77	
X3P8332HFEA	1133.00	60.8			161			79.5	
X3P8532HFEA	1133.00	64.5	210	230	210			230	
X3P8732HFFA	1185.00	74.5	180	200			1.1/4"	172	85

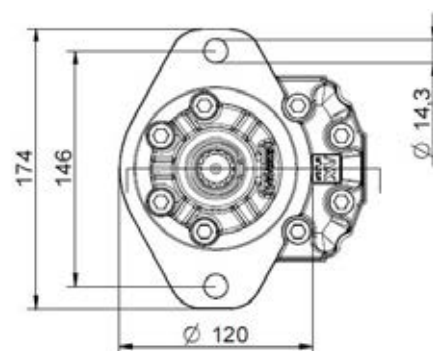
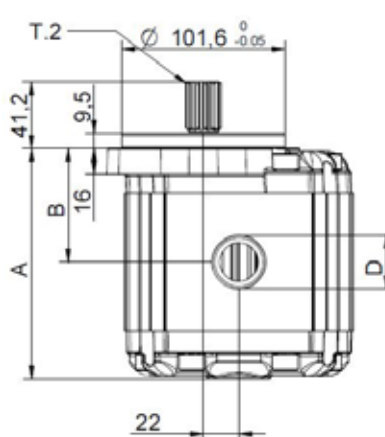
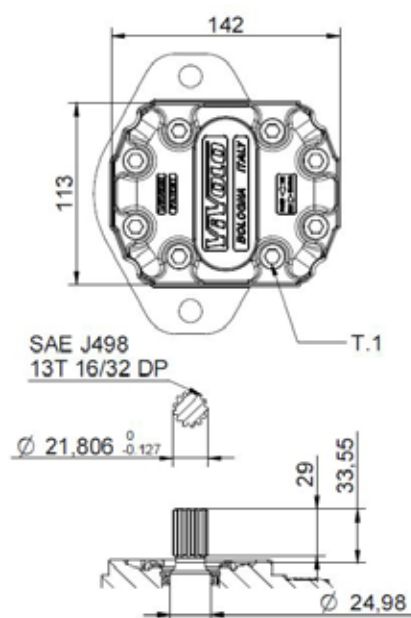




PREMIUM
ITALIAN PRODUCT

Group 3 SAE B Mount, 7/8" 13 Tooth Splined Shaft

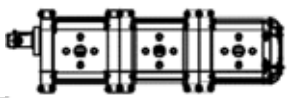
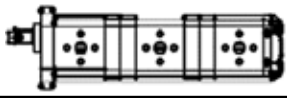
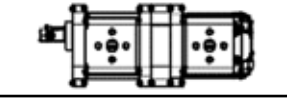
Part Number	List Price \$	CC	Max Pressure bar		Max/Min Speed	Port S	Port P	A	B	
			Working	Peak				mm		
X3P6632IDDA	1015.00	14.9	300	320	3000/700	3/4" BSPP	3/4" BSPP	124	61	
X3P6832IEDA	1015.00	17.4				126		62		
X3P7032IEDA	1015.00	21.1	280	300		1" BSPP		3/4" BSPP	129	63.5
X3P7232IEDA	1015.00	27.0	250	270					133	65.5
X3P7432IEDA	1015.00	32.3							138	68
X3P7832IEDA	1082.00	38.5							143	70.5
X3P7932IFEA	1082.00	43.4			2800/700	2300/700	1.1/4" BSPP	1" BSPP	147	72.5
X3P8032IFEA	1082.00	47.2	230	250					230	250
X3P8132IFEA	1133.00	50.9							153	75.5
X3P8232IFEA	1133.00	54.6							156	77
X3P8332IFEA	1133.00	60.8							161	79.5
X3P8532IFEA	1133.00	64.5	210	230					210	230
X3P8632IFEA	1185.00	70.7	200	220	169	83.5				
X3P8732IFFA	1185.00	74.5	180	200	1.1/4" BSPP	172			85	
X3P8932IFFA	1205.00	86.9	150	170		182			90	



VIVOIL MULTIPLE PUMP NOMENCLATURE

9										
	1	2	3	4	5	6	7	8	9	10

1 Body Shape

M	Standard	
S	Shaped	
T	Separated Stages	
A	Single Inlet	

2 Number of Elements

2+



3 Flange & Rotation

	DIN Flange		SAE Flange	
	CW	CCW	CW	CCW
Group 0	02	01	n/a	n/a
Group 1	02	01	62	61
Group 2	02	01	52	51
Group 3	02	01	32	31

4 Shaft

Group 0	7mm Keyed	A
Group 1	DIN 1:8 Taper	F
Group 2	DIN 1:8 Taper	E
	5/8" 9T Spline SAE A	I
Group 3	DIN 1:8 Taper	A
	7/8" Keyed SAE B	H
	7/8" 13T Spline SAE B	I

* Other shafts available ex-Vivoil on request

* Vivoil do not produce a 5/8" keyed shaft for multiple pumps

5 Ports

G	BSPP

* Others available ex-Vivoil on request

6 Rear Cover

A	Standard blank cover
B	Rear suction port
C	Rear pressure port
D	Rear suction & pressure ports
O	Rear relief with internal drain
N	Rear relief with external drain

7+ Displacement CCs

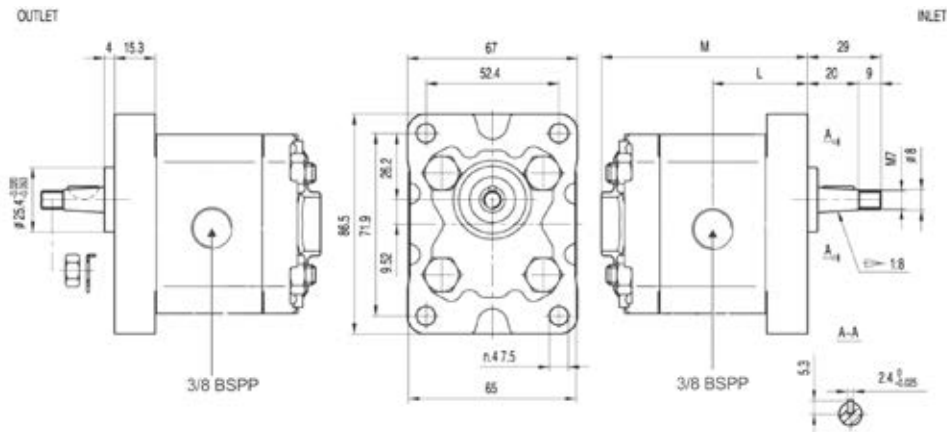
Code	Group 0	Code	Group 1	Code	Group 2	Code	Group 3
01	0.17cc	16	0.9cc	41	4cc	66	15cc
02	0.25cc	17	1.2cc	43	6cc	68	18cc
04	0.45cc	18	1.7cc	45	9cc	70	21cc
05	0.57cc	20	2.2cc	47	11cc	72	27cc
06	0.76cc	21	2.6cc	49	14cc	74	32cc
07	0.98cc	23	3.2cc	51	17cc	78	38cc
09	1.27cc	25	3.8cc	53	19cc	79	43cc
11	1.52cc	27	4.3cc	55	22cc	80	47cc
13	2.30cc	29	4.9cc	57	26cc	81	51cc
		31	5.9cc	59	30cc	82	54cc
		32	6.5cc	61	34cc	83	61cc
		34	7.8cc	63	40cc	85	64cc
		36	9.8cc			86	70cc
						87	74cc
						89	90cc

GEAR PUMPS, MOTORS & FLOW DIVIDERS

Group 1 Pumps

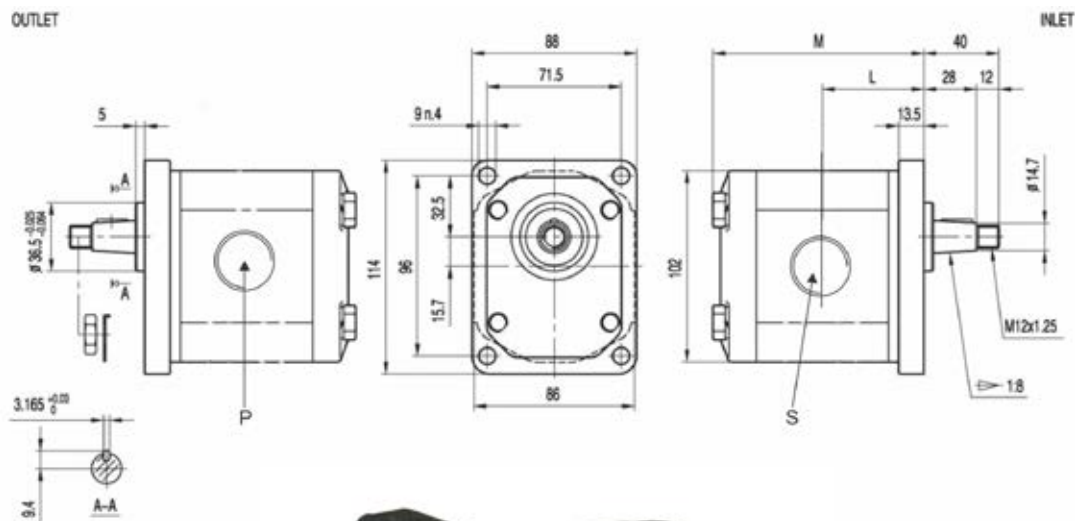
Group 1 DIN Mount, 1:8 Tapered Shaft

Part Number	List Price \$	CC	Pressure Bar		Max/Min Speed	Port P	Port S
			Rated	Max			
1APG-1.1-L46-Z02-R-SS	247.00	1.1	200 bar	250 bar	6000/600	3/8” BSPP	3/8” BSPP
1APG-1.6-L46-Z02-R-SS	247.00	1.6					
1APG-2.1-L46-Z02-R-SS	247.00	2.1					
1APG-2.7-L46-Z02-R-SS	247.00	2.7					
1APG-3.2-L46-Z02-R-SS	247.00	3.2					
1APG-3.7-L46-Z02-R-SS	247.00	3.7					
1APG-4.2-L46-Z02-R-SS	247.00	4.2	160 bar	200 bar	4000/600		
1APG-4.8-L46-Z02-R-SS	247.00	4.8			3500/600		
1APG-5.8-L46-Z02-R-SS	247.00	5.8			2900/600		
1APG-8.0-L46-Z02-R-SS	247.00	8.0			2100/600		



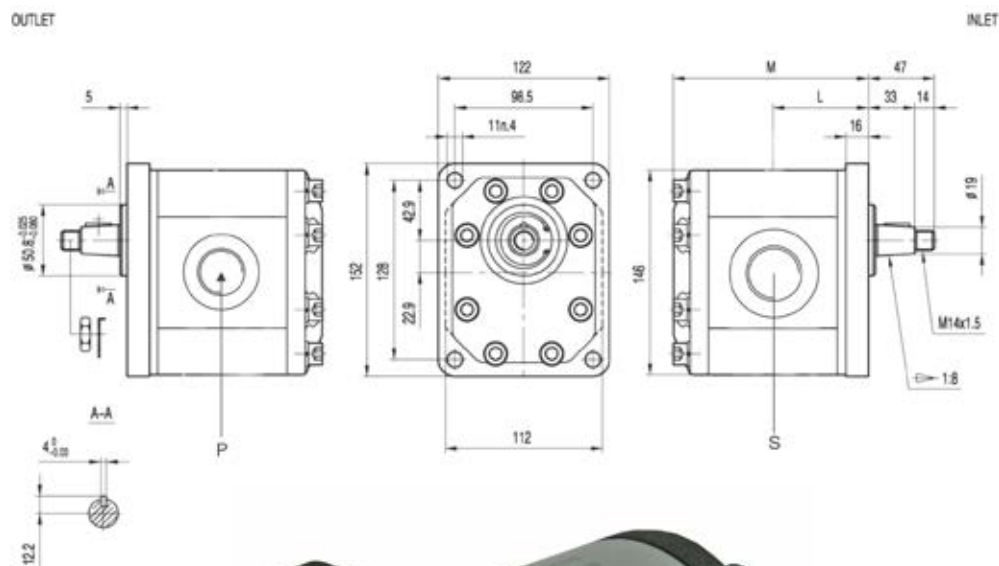
Group 2 DIN Mount, 1:8 Tapered Shaft

Part Number	List Price \$	CC	Pressure Bar		Max/Min Speed	Port P	Port S	M	L
			Rated	Max				mm	
2APG-4-L04-Z03-R-SS-K	340.00	4	175 bar	200 bar	3500/500	1/2" BSPP	1/2"	93	44.5
2APG-6-L04-Z03-R-SS-K	340.00	6					BSPP	96	46
2APG-8-L08-Z03-R-SS-K	340.00	8					3/4" BSPP	93.3	47.7
2APG-10-L08-Z03-R-SS-K	340.00	10						102.6	49.3
2APG-12-L08-Z03-R-SS-K	340.00	12						105.9	51
2APG-14-L08-Z03-R-SS-K	340.00	14						109.3	52.7
2APG-16-L03-Z03-R-SS-K	340.00	16						112.7	54
2APG-18-L03-Z03-R-SS-K	340.00	18					3/4" BSPP	1" BSPP	116
2APG-20-L03-Z03-R-SS-K	361.00	20	119.3	57.7					
2APG-23-L03-Z03-R-SS-K	361.00	23	175 bar	200 bar	122.6	59.3			
2APG-25-L03-Z03-R-SS-K	361.00	25			127.6	61.8			
2APG-28-L03-Z03-R-SS-K	402.00	28	160 bar	200 bar	132.6	64.3			
2APG-30-L03-Z03-R-SS-K	402.00	30			135.9	66			



Group 3 DIN Mount, 1:8 Tapered Shaft

Part Number	List Price \$	CC	Pressure Bar		Max/Min Speed	Port P	Port S	M	L	
			Rated	Max				mm		
3APG-22-L69-Z05-R-SS-K	608.00	22	175 bar	200 bar	3000/400	3/4" BSPP	3/4"	128.5	65.5	
3APG-26-L03-Z05-R-SS-K	608.00	26					1" BSPP	131.5	67	
3APG-34-L03-Z05-R-SS-K	608.00	34						137	69.8	
3APG-39-L03-Z05-R-SS-K	608.00	39						141	71.8	
3APG-43-L11-Z05-R-SS-K	659.00	43			2800/400	1" BSPP	1.1/4" BSPP	143.5	73	
3APG-51-L11-Z05-R-SS-K	659.00	51	175 bar	200 bar				149.5	76	
3APG-60-L11-Z05-R-SS-K	659.00	60						156	79.3	
3APG-70-L60-Z05-R-SS-K	711.00	70	160 bar	200 bar	2500/400	1.1/4" BSPP	1.1/2" BSPP	163	82.8	
3APG-78-L60-Z05-R-SS-K	711.00	78	140 bar	180 bar	2300/400			171	85	
3APG-89-L60-Z05-R-SS-K	711.00	89			2000/400			176	88	



GEAR PUMPS, MOTORS & FLOW DIVIDERS

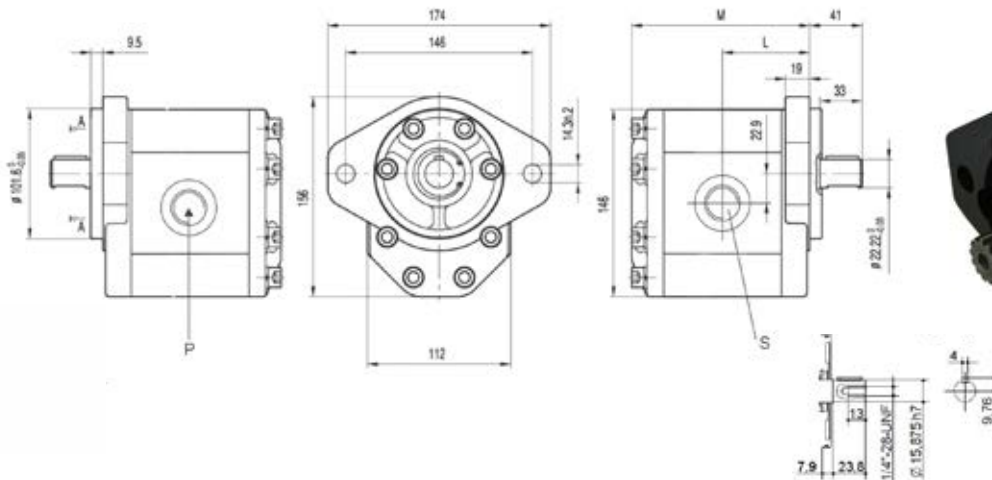
Group 3 Pumps

Group 3 SAE B Mount, 7/8" Keyed Shaft

Part Number	List Price \$	CC	Max Pressure		Max/Min Speed	Port P	Port S
			Rated	Max			
3APG-22-L42-P16-R-SS-K	608.00	22	175 bar	200 bar	3000/400	1.1/16" UNO	1.5/16" UNO
3APG-26-L42-P16-R-SS-K	608.00	26					
3APG-34-L42-P16-R-SS-K	608.00	34					
3APG-39-L42-P16-R-SS-K	608.00	39					
3APG-43-L51-P16-R-SS-K	659.00	43	175 bar	200 bar	2800/400	1.5/16" UNO	1.5/8" UNO
3APG-51-L51-P16-R-SS-K	659.00	51					
3APG-60-L53-P16-R-SS-K	659.00	60					
3APG-70-L53-P16-R-SS-K	711.00	70					
3APG-78-L53-P16-R-SS-K	711.00	78	160 bar	200 bar	2300/400	1.5/16" UNO	1.5/8" UNO
3APG-89-L53-P16-R-SS-K	711.00	89	140 bar	180 bar	2000/400		

OUTLET

INLET



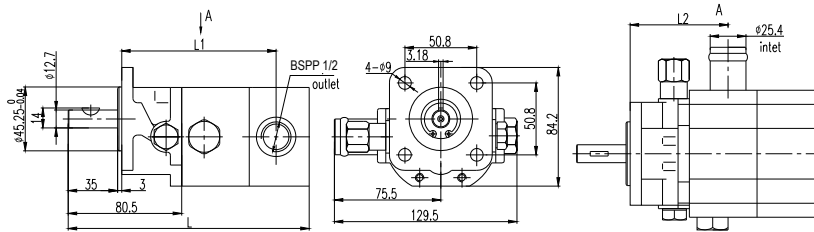
Group 3 SAE B Mount, 7/8" 13T Spline Shaft

Part Number	List Price \$	CC	Max Pressure		Max/Min Speed	Port P	Port S
			Rated	Max			
3APG-22-L42-S05-R-SS-K	608.00	22	175 bar	200 bar	3000/400	1.1/16" UNO	1.5/16" UNO
3APG-26-L42-S05-R-SS-K	608.00	26					
3APG-34-L42-S05-R-SS-K	608.00	34					
3APG-39-L42-S05-R-SS-K	608.00	39					
3APG-43-L51-S05-R-SS-K	659.00	43	175 bar	200 bar	2800/400	1.5/16" UNO	1.5/8" UNO
3APG-51-L51-S05-R-SS-K	659.00	51					
3APG-60-L53-S05-R-SS-K	659.00	60					
3APG-70-L53-S05-R-SS-K	711.00	70					
3APG-78-L53-S05-R-SS-K	711.00	78	160 bar	200 bar	2300/400	1.5/16" UNO	1.5/8" UNO
3APG-89-L53-S05-R-SS-K	711.00	89	140 bar	180 bar	2000/400		

Log Splitter

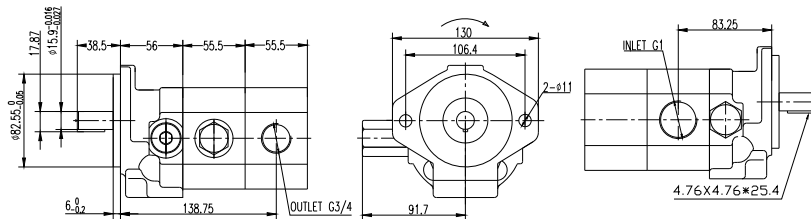
Part Number	List Price \$	CC Hi Flow	CC Low Flow	Unload Pressure Range	Max Pressure
CBT8.8/2.1-L08-C	515.00	8.8	2.1	30-60 bar	200 bar
CBT8.8/3.0-L08-C	515.00	11.8	3.0		
CBT13.0/2.1-L08-C	567.00	13.0	2.1		
CBT13.0/3.0-L08-C	567.00	13.0	3.0		
CBT13.0/4.2-L08-C	567.00	13.0	4.2		

Suction 3/4" BSPP
Pressure 1/2" BSPP



Part Number	List Price \$	CC Hi Flow	CC Low Flow	Unload Pressure Range	Max Pressure
CBT15.2/7.6-L03-C	618.00	15.2	7.6	30-60 bar	200 bar
CBT22.9/7.6-L03-C	670.00	22.9	7.6		

Suction 1" BSPP
Pressure 3/4" BSPP

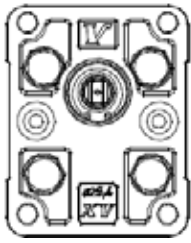
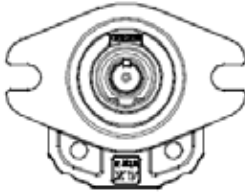


ORDER CODE FOR VIVOIL GROUP 1 MOTORS

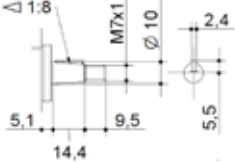
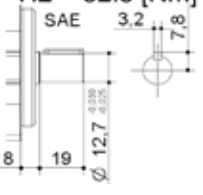
Note: Additional costs apply
for non-standard options

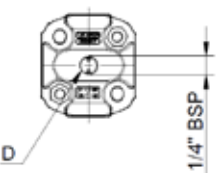
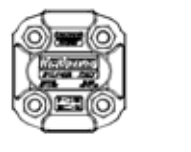
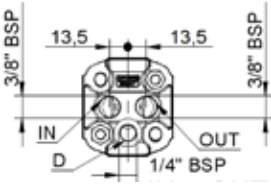
Series	Group	Motor	Displacement	Flange	Shaft	Inlet Port	Outlet Port	Rear Cover
X	1	M	27	01	F	B	B	F

Displacement	
0.9cc	16
1.2cc	17
1.7cc	18
2.2cc	20
2.6cc	21
3.2cc	23
3.8cc	25
4.3cc	27
4.9cc	29
5.9cc	31
6.5cc	32
7.8cc	34
9.8cc	36

Flange	
 DIN Group 1	01
 SAE-AA	61

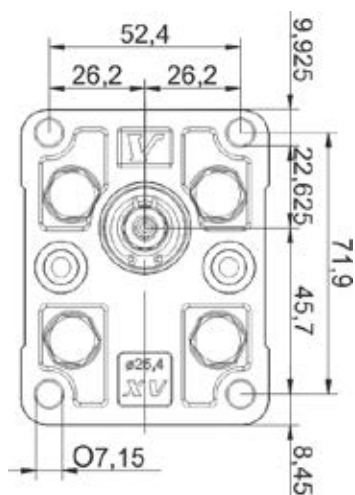
Ports	Inlet	Outlet
0.9cc	B	B
1.2cc	B	B
1.7cc	B	B
2.2cc	B	B
2.6cc	B	B
3.2cc	B	B
3.8cc	B	B
4.3cc	B	B
4.9cc	B	B
5.9cc	B	B
6.5cc	B	B
7.8cc	B	B
9.8cc	B	B
B = 3/8" BSP		

Shaft	
CO001 - Tapered T.2 = 43 [Nm]  Tapered 1:8 Ø 10mm - M7x1 Key 2.4mm	F
CI002 - Parallel T.2 = 32.8 [Nm]  Parallel Ø 1/2" - Key 3.2mm	B

Rear Cover	
 1/4" BSP EXTERNAL DRAIN	E
 INTERNAL DRAIN	F
 3/8" BSP 13.5 13.5 1/4" BSP REAR PORTED EXTERNAL DRAIN	K

Group 1 DIN Mount, 1:8 Tapered Shaft

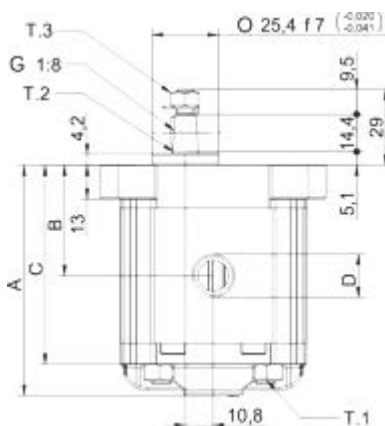
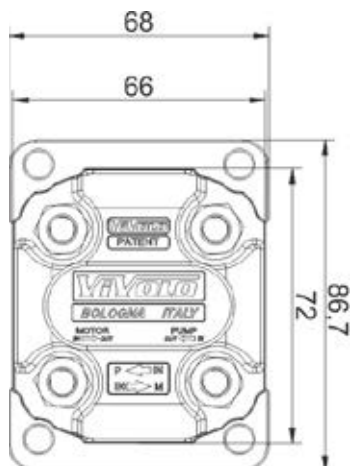
Part Number	List Price \$	CC	Max Pressure Inlet	Min Start Pressure Drain	Max/Min Speed	Port S	Port P	A	B mm	C
X1M1601FBBE	536.00	0.9	240					78.1	37.3	66.1
X1M1701FBBE	536.00	1.2		30				79.0	37.8	67.0
X1M1801FBBE	536.00	1.7						80.5	38.5	68.5
X1M2001FBBE	536.00	2.2		25				82.5	39.5	70.5
X1M2101FBBE	536.00	2.6		20	6000/700			84.5	40.5	72.5
X1M2301FBBE	453.00	3.2						86.5	41.5	74.5
X1M2501FBBE	453.00	3.8		15				88.5	42.5	76.5
X1M2701FBBE	453.00	4.3						90.5	43.5	78.5
X1M2901FBBE	474.00	4.9						93.5	45.0	81.5
X1M3101FBBE	474.00	5.9						97.0	46.8	85.0
X1M3201FBBE	474.00	6.5		10	5000/700			98.5	48.0	86.5
X1M3401FBBE	474.00	7.8	220					103.5	50.0	91.5
X1M3601FBBE	474.00	9.8	190		4000/700			112.5	54.5	100.5



Available with SAE A-2 bolt
with keyed or spline shaft

Internal drain available
on request

Rear port with drain
available

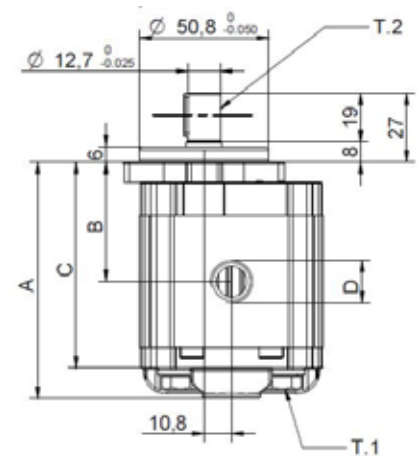


Seal Kit

Part Number	List Price \$	Material
8KGX1M1.A	41.00	NBR
8KGX1M1.V	118.00	Viton

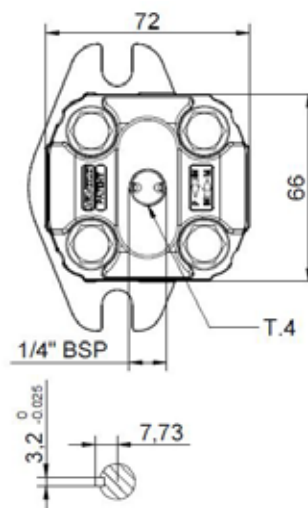
Group 1 SAE AA Mount, 1/2" Keyed Shaft

Part Number	List Price \$	CC	Max Pressure Inlet	Min Start Pressure	Max/Min Speed	Port S	Port P	A	B mm	C
X1M1661BBBE	536.00	0.9	240					82.6	41.8	70.6
X1M1761BBBE	536.00	1.2		30				83.5	42.3	71.5
X1M1861BBBE	536.00	1.7						85.0	43.0	73.0
X1M2061BBBE	536.00	2.2		25				87.0	44.0	75.0
X1M2161BBBE	536.00	2.6		20				89.0	45.0	77.0
X1M2361BBBE	453.00	3.2			6000/700			91.0	46.5	79.0
X1M2561BBBE	453.00	3.8						93.0	47.0	81.0
X1M2761BBBE	453.00	4.3		15				95.0	48.0	83.0
X1M2961BBBE	474.00	4.9						98.0	49.5	86.0
X1M3161BBBE	474.00	5.9						101.5	51.3	89.5
X1M3261BBBE	474.00	6.5			5000/700			105.0	52.5	93.0
X1M3461BBBE	474.00	7.8	220	10				108.0	54.5	96.0
X1M3661BBBE	474.00	9.8	190		4000/700			117.0	59.0	105.0



Seal Kit

Part Number	List Price \$	Material
8KGX1M2.A	41.00	NBR
8KGX1M2.V	118.00	Viton



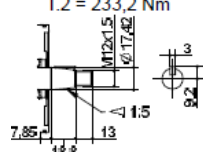
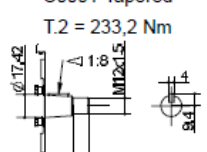
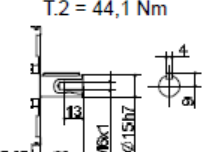
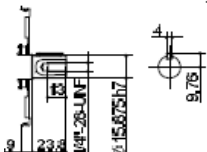
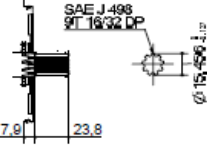
ORDER CODE FOR VIVOIL GROUP 2 MOTORS

Note: Additional costs apply
for non-standard options

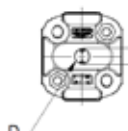
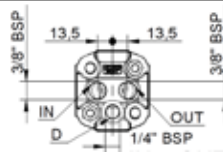
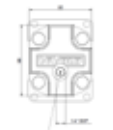
Series	Group	Motor	Displacement	Flange	Shaft	Inlet Port	Outlet Port	Rear Cover
X	2	M	51	32	A	C	C	A

Displacement	
4.2cc	41
6.0cc	43
8.4cc	45
10.8cc	47
14.4cc	49
16.8cc	51
19.2cc	53
22.8cc	55
26.2cc	57
30.0cc	59
34.2cc	61
39.6cc	63

Flange	
 DIN Group 2	 ø80 German Standardized
 SAE-A	 ø50 HY German Standardized

Shaft	
C0002-Tapered T.2 = 233,2 Nm  Tapered 1:5 ø 17.4mm M12x1.5 - Key 3mm GERMAN MOUNT ONLY	F
C0001-Tapered T.2 = 233,2 Nm  Tapered 1:8 ø 17.2mm M12x1.5 - Key 4mm	E
CI001-Parallel T.2 = 44,1 Nm  Parallel ø 15mm - Key 4mm	A
CI002-Parallel T.2 = 67,5 Nm  Parallel ø 5/8" - Key 4mm	B
SCF04-Splined T.2 = 104,6 Nm  SAE J 498 9T 16/32 DP Splined 9t 16/32 DP	I

Ports	Inlet	Outlet
4.2cc	B	B
6.0cc	B	B
8.4cc	B	B
10.8cc	B	B
14.4cc	C	C
16.8cc	C	C
19.2cc	C	C
22.8cc	C	C
26.2cc	D	D
30.0cc	D	D
34.2cc	D	D
39.6cc	D	D
B = 1/2" BSPP		
C = 3/4" BSPP		
D = 1" BSPP		

Rear Cover	
 EXTERNAL DRAIN	E
 INTERNAL DRAIN	F
 REAR PORTED EXTERNAL DRAIN	K
 ANTI CAVITY CHECK VALVE W/ EXTERNAL DRAIN	001

Group 2 DIN Mount, 1:8 Tapered Shaft

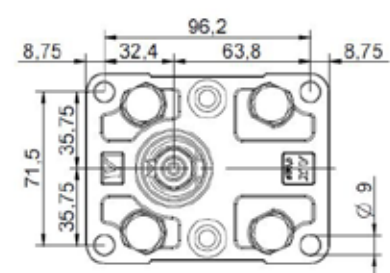
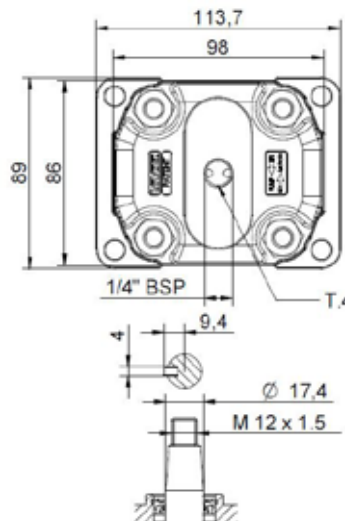
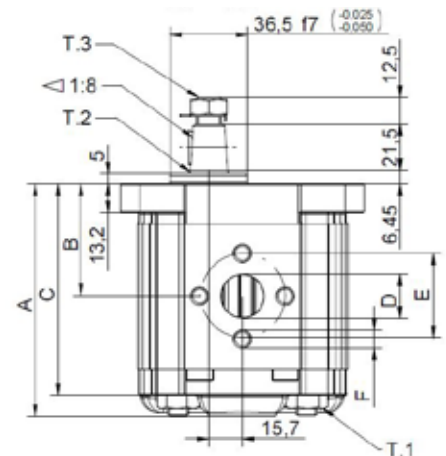
Part Number	List Price \$	CC	Max Pressure Inlet	Min Start Drain	Min Start Pressure	Max/Min Speed	Port S	Port P	A	B mm	C
X2M4101EBBE	577.00	4.2	300	6 Bar	30	3500/700	1/2" BSPP	1/2" BSPP	87.2	41.7	77.2
X2M4301EBBE	577.00	6.0			25				90.2	43.2	80.2
X2M4501EBBE	577.00	8.4			20				94.2	45.2	84.2
X2M4701EBBE	577.00	10.8							98.2	47.2	88.2
X2M4901ECCE	587.00	14.4	290		15	3000/700	3/4" BSPP	3/4" BSPP	104.2	50.2	94.2
X2M5101ECCE	587.00	16.8	270						108.2	52.2	98.2
X2M5301ECCE	618.00	19.2	250						112.2	54.2	102.2
X2M5501ECCE	618.00	22.8	240						118.2	57.2	108.2
X2M5701EDDE	618.00	26.2	210			2500/700	1" BSPP	1" BSPP	122.2	59.2	112.2
X2M5901EDDE	680.00	30.0	200						130.2	63.2	120.2
X2M6101EDDE	680.00	34.2	190						137.2	66.7	127.2
X2M6301EDDE	680.00	39.6	180						2000/700		71.2

Available with SAE A-2 bolt
with keyed or spline shaft

Internal drain available
on request

Rear port with drain
available

Available with
anti-cavitation check valve

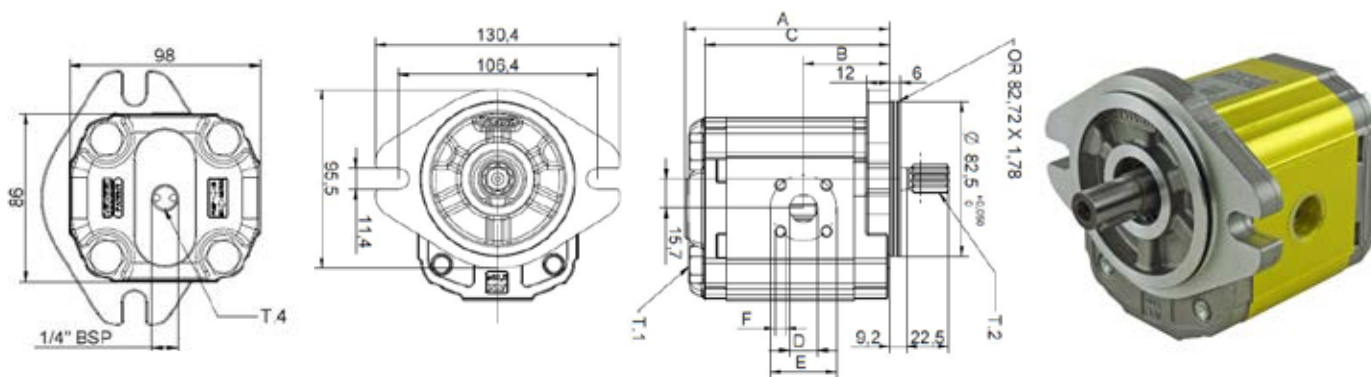


Seal Kit

Part Number	List Price \$	Material
8KGX2M1.A	73.00	NBR
8KGX2M1.V	139.00	Viton

Group 2 SAE A Mount, 5/8" Keyed Shaft

Part Number	List Price \$	CC	Max Pressure Inlet Drain	Min Start Pressure	Max/Min Speed	Port S	Port P	A	B mm	C
X2M4131BBBE	577.00	4.2	300	6 Bar	3500/700	1/2" BSPP	1/2" BSPP	88.0	39.4	78.0
X2M4331BBBE	577.00	6.0						91.0	39.4	81.0
X2M4531BBBE	577.00	8.4						95.0	41.4	85.0
X2M4731BBBE	577.00	10.8						99.0	45.8	89.0
X2M4931BCCE	587.00	14.4	290	15	3000/700	3/4" BSPP	3/4" BSPP	105.0	45.8	95.0
X2M5131BCCE	587.00	16.8	270					109.0	45.8	99.0
X2M5331BCCE	618.00	19.2	250					113.0	45.8	103.0
X2M5531BCCE	618.00	22.8	240					119.0	53.3	109.0
X2M5731BDDE	618.00	26.2	210		2500/700	1" BSPP	1" BSPP	123.0	53.3	113.0
X2M5931BDDE	680.00	30.0	200					131.0	61.5	121.0
X2M6131BDDE	680.00	34.2	190					138.0	61.5	128.0
X2M6331BDDE	680.00	39.6	180					147.0	61.5	137.0



Group 2 SAE A Mount, 5/8" 9 Tooth Splined Shaft

Part Number	List Price \$	CC	Max Pressure Inlet Drain	Min Start Pressure	Max/Min Speed	Port S	Port P	A	B mm	C
X2M4131IBBE	577.00	4.2	300	6 Bar	3500/700	1/2" BSPP	1/2" BSPP	88.0	39.4	78.0
X2M4331IBBE	577.00	6.0						91.0	39.4	81.0
X2M4531IBBE	577.00	8.4						95.0	41.4	85.0
X2M4731IBBE	577.00	10.8						99.0	45.8	89.0
X2M4931ICCE	587.00	14.4	290	15	3000/700	3/4" BSPP	3/4" BSPP	105.0	45.8	95.0
X2M5131ICCE	587.00	16.8	270					109.0	45.8	99.0
X2M5331ICCE	618.00	19.2	250					113.0	45.8	103.0
X2M5531ICCE	618.00	22.8	240					119.0	53.3	109.0
X2M5731IDDE	618.00	26.2	210		2500/700	1" BSPP	1" BSPP	123.0	53.3	113.0
X2M5931IDDE	680.00	30.0	200					131.0	61.5	121.0
X2M6131IDDE	680.00	34.2	190					138.0	61.5	128.0
X2M6331IDDE	680.00	39.6	180					147.0	61.5	137.0

ORDER CODE FOR VIVOIL GROUP 3 MOTORS

Note: Additional costs apply for non-standard options

Series	Group	Motor	Displacement	Flange	Shaft	Inlet Port	Outlet Port	Rear Cover
X	3	M	66	32	I	D	D	A

Displacement	
14.9cc	66
17.4cc	68
21.1cc	70
27.0cc	72
32.3cc	74
38.5cc	78
43.4cc	79
47.2cc	80
50.9cc	81
54.6cc	82
60.8cc	83
64.5cc	85
70.7cc	86
74.5cc	87
86.9cc	89

Shaft	
CO001 - Tapered T.2 = 482 [Nm] Tapered 1:8 Ø 22mm - M14x1.5 Key 4mm	A
CI004 - Parallel T.2 = 180 [Nm] Parallel Ø 7/8" - Key 6.35mm	H
SCF04 - Splined T.2 = 264 [Nm] Splined 7/8" 13t	I

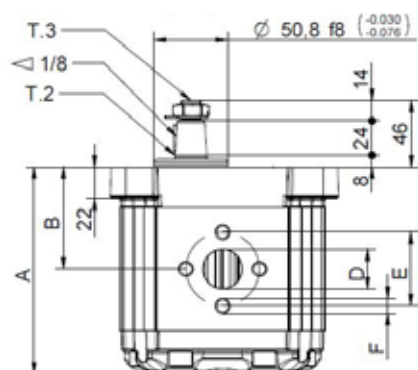
Ports	Inlet	Outlet
14.9cc	D	D
17.4cc	D	D
21.1cc	D	D
27.0cc	E	E
32.3cc	E	E
38.5cc	E	E
43.4cc	E	E
47.2cc	E	E
50.9cc	E	E
54.6cc	E	E
60.8cc	E	E
64.5cc	E	E
70.7cc	F	F
74.5cc	F	F
86.9cc	F	F
D = 3/4" BSPP		
E = 1" BSPP		
F = 1.1/4" BSPP		

Flange	
DIN Group 3	01
SAE-B	31

Rear Cover	
EXTERNAL DRAIN	E
INTERNAL DRAIN	K

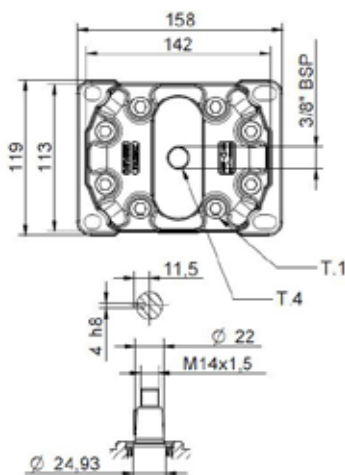
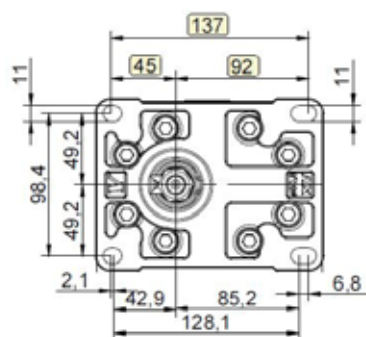
Group 3 DIN Mount, 1:8 Tapered Shaft

Part Number	List Price \$	CC	Max Pressure Inlet	Min Start Pressure	Max/Min Speed	Port S	Port P	A mm	B mm
X3M6601ADDE	1236.00	14.9	320	20	3000/700	3/4" BSPP	3/4" BSPP	124	61
X3M6801ADDE	1236.00	17.4	300	15	3000/700	3/4" BSPP	3/4" BSPP	126	62
X3M7001ADDE	1257.00	21.1	300	15	3000/700	3/4" BSPP	3/4" BSPP	129	63.5
X3M7201AEEE	1257.00	27.0	270	10	3000/700	3/4" BSPP	3/4" BSPP	133	65.5
X3M7401AEEE	1318.00	32.3	270	10	3000/700	3/4" BSPP	3/4" BSPP	138	68
X3M7801AEEE	1318.00	38.5	270	10	3000/700	3/4" BSPP	3/4" BSPP	143	70.5
X3M7901AEEE	1318.00	43.4	250	10	2800/700	1" BSPP	1" BSPP	147	72.5
X3M8001AEEE	1360.00	47.2	250	10	2800/700	1" BSPP	1" BSPP	150	74
X3M8101AEEE	1360.00	50.9	250	10	2800/700	1" BSPP	1" BSPP	153	75.5
X3M8201AEEE	1360.00	54.6	250	10	2800/700	1" BSPP	1" BSPP	156	77
X3M8301AFFE	1360.00	60.8	220	10	2300/700	1.1/4" BSPP	1.1/4" BSPP	161	79.5
X3M8501AFFE	1360.00	64.5	220	10	2300/700	1.1/4" BSPP	1.1/4" BSPP	164	81
X3M8601AFFE	1421.00	70.7	210	10	2300/700	1.1/4" BSPP	1.1/4" BSPP	169	83.5
X3M8701AFFE	1421.00	74.5	190	10	2300/700	1.1/4" BSPP	1.1/4" BSPP	172	85
X3M8901AFFE	1421.00	86.9	160	10	2300/700	1.1/4" BSPP	1.1/4" BSPP	182	90



Available with SAE A-2 bolt
with keyed or spline shaft

Rear port with drain
available

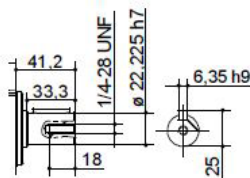
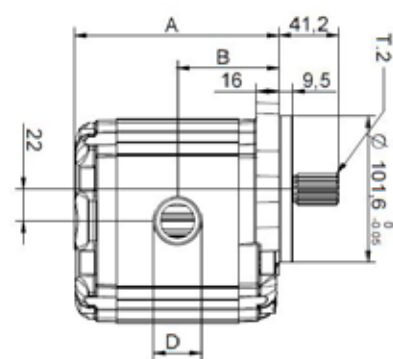
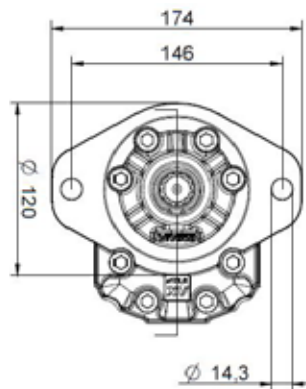
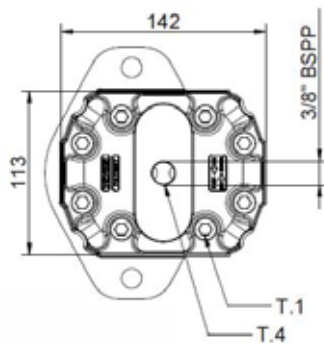


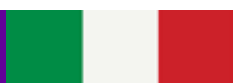
Seal Kit

Part Number	List Price \$	Material
8KGX3M1.A	134.00	NBR
8KGX3M1.V	252.00	Viton

Group 3 SAE B Mount, 7/8" Keyed Shaft

Part Number	List Price \$	CC	Max Pressure Inlet	Min Start Drain	Min Start Pressure	Max/Min Speed	Port S	Port P	A mm	B
X3M6631BDDE	1236.00	14.9	320	6 Bar	20	3000/700	3/4" BSPP	3/4" BSPP	124	61
X3M6831BDDE	1236.00	17.4							126	62
X3M7031BDDE	1257.00	21.1	300		15				129	63.5
X3M7231HEEE	1257.00	27.0	270		10				2800/700	1" BSPP
X3M7431HEEE	1318.00	32.3				138	68			
X3M7831HEEE	1318.00	38.5				143	70.5			
X3M7931HEEE	1318.00	43.4	250			2300/700	1.1/4" BSPP	1.1/4" BSPP		
X3M8031HEEE	1360.00	47.2							150	74
X3M8131HEEE	1360.00	50.9							153	75.5
X3M8231HEEE	1360.00	54.6	156		77					
X3M8331HFFE	1360.00	60.8	220	2300/700	1.1/4" BSPP	1.1/4" BSPP	161	79.5		
X3M8531HFFE	1360.00	64.5					164	81		
X3M8631HFFE	1421.00	70.7	210				169	83.5		
X3M8731HFFE	1421.00	74.5	190				172	85		
X3M8931HFFE	1421.00	86.9	160				182	90		

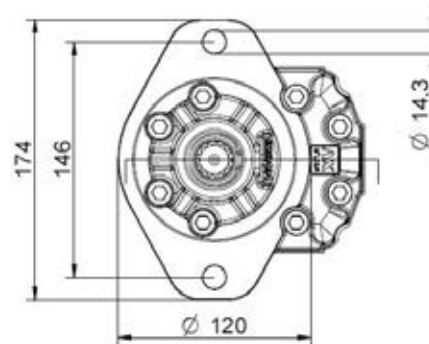
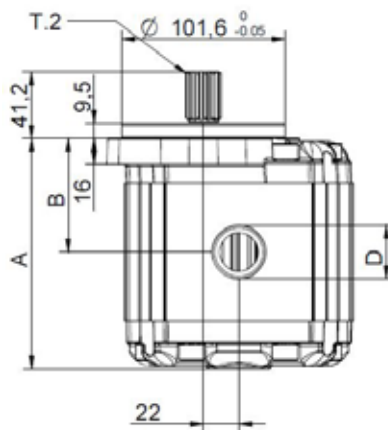
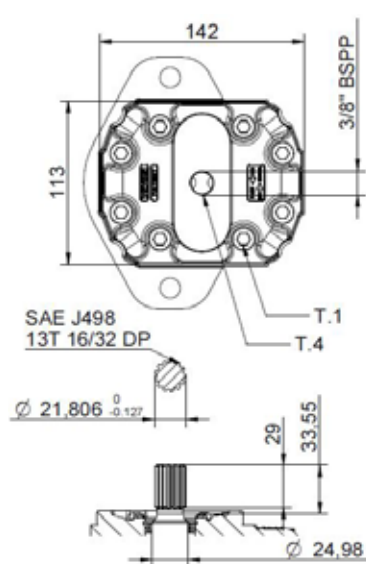




PREMIUM
ITALIAN PRODUCT

Group 3 SAE B Mount, 7/8" 13 Tooth Splined Shaft

Part Number	List Price \$	CC	Max Pressure Inlet	Min Start Drain	Max/Min Speed	Port S	Port P	A mm	B mm
X3M6631IDDE	1236.00	14.9	320	20	3000/700	3/4" BSPP	3/4" BSPP	124	61
X3M6831IDDE	1236.00	17.4	300	15	3000/700	3/4" BSPP	3/4" BSPP	126	62
X3M7031IDDE	1257.00	21.1	300	15	3000/700	3/4" BSPP	3/4" BSPP	129	63.5
X3M7231IEEE	1257.00	27.0	270	10	3000/700	3/4" BSPP	3/4" BSPP	133	65.5
X3M7431IEEE	1318.00	32.3	270	10	3000/700	3/4" BSPP	3/4" BSPP	138	68
X3M7831IEEE	1318.00	38.5	270	10	3000/700	3/4" BSPP	3/4" BSPP	143	70.5
X3M7931IEEE	1318.00	43.4	250	10	2800/700	1" BSPP	1" BSPP	147	72.5
X3M8031IEEE	1360.00	47.2	250	10	2800/700	1" BSPP	1" BSPP	150	74
X3M8131IEEE	1360.00	50.9	250	10	2800/700	1" BSPP	1" BSPP	153	75.5
X3M8231IEEE	1360.00	54.6	250	10	2800/700	1" BSPP	1" BSPP	156	77
X3M8331IFFE	1360.00	60.8	220	10	2300/700	1.1/4" BSPP	1.1/4" BSPP	161	79.5
X3M8531IFFE	1360.00	64.5	220	10	2300/700	1.1/4" BSPP	1.1/4" BSPP	164	81
X3M8631IFFE	1421.00	70.7	210	10	2300/700	1.1/4" BSPP	1.1/4" BSPP	169	83.5
X3M8731IFFE	1421.00	74.5	190	10	2300/700	1.1/4" BSPP	1.1/4" BSPP	172	85
X3M8931IFFE	1421.00	86.9	160	10	2300/700	1.1/4" BSPP	1.1/4" BSPP	182	90

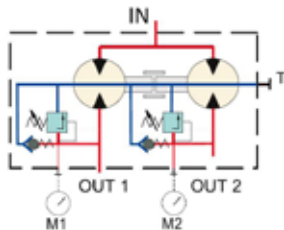


2-way Rotary Gear Flow Dividers, Differential Relief

	Part Number	List Price \$	Displacement per Section	Body Size	Max Pressure	Inlet Flow Ratings LPM			Port Size BSPP		Relief Range
						Min	Recommended	Max	In	Out	
	9RV02B04	1705.00	0.45	Group 0	210 bar	1.2	2.4	6	1/4"	1/4"	35-175 bar
	9RV02B06	1705.00	0.76			2	4	9.6			
	9RV02B09	1705.00	1.27			3	6	14.4			
	9RV02A18	1962.00	1.7	Group 1	220 bar	4	8	18	1/2"	3/8"	7-210 bar
	9RV02A23	1962.00	3.2			7	15	36			
	9RV02A32	2039.00	6.5			13	26	60			
	9RV02B45	2333.00	8.4	Group 2	210 bar	21.6	30.2	45	3/4"	1/2"	70-210 bar
	9RV02B47	2333.00	10.8			26.4	38.8	55			
NEW	9RV02B51	2451.00	16.8		200 bar	40.8	60.4	85			
NEW	9RV02B55	2451.00	22.8		180 bar	52.8	82	110			
NEW	9RV02B59	2601.00	30.0		160 bar	72	108	150	1"	3/4"	
NEW	9RV02B63	2601.00	39.6		130 bar	96	142.6	200			

INTERNAL DRAIN (Standard Setup)

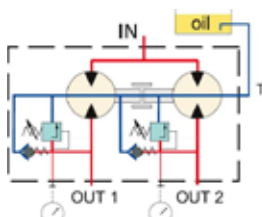
Note that with this configuration the function of anticavitation valves is annulled.

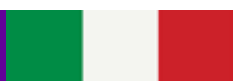


EXTERNAL DRAIN (Standard Setup)

For the correct functioning of the flow divider, **it has to be installed under the oil level.**

The drain tube has to pick up under the oil level and it has not to aspire air.

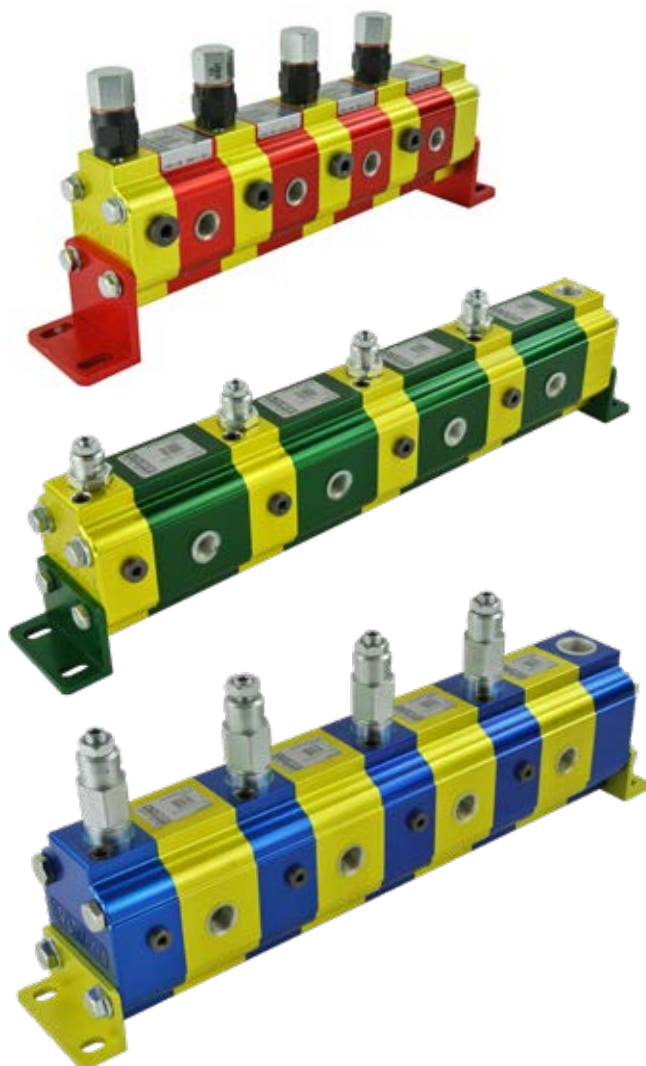




PREMIUM
ITALIAN PRODUCT

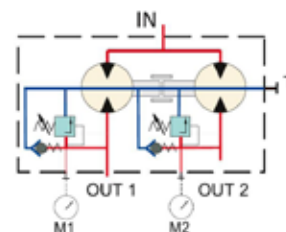
4-way Rotary Gear Flow Dividers, Differential Relief

	Part Number	List Price \$	Displacement per Section	Body Size	Max Pressure	Inlet Flow Ratings LPM			Port Size BSPP		Relief Range
						Min	Recommended	Max	In	Out	
	9RV04B04	3409.00	0.45	Group 0	210 bar	2.4	4.8	12	1/4"	1/4"	35-175 bar
	9RV04B06	3409.00	0.76			4	8	19.2			
	9RV04B09	3409.00	1.27			6	12	28.8			
	9RV04A18	3924.00	1.7	Group 1	220 bar	8	16	36	1/2"	3/8"	7-210 bar
	9RV04A23	3924.00	3.2			14	30	72			
	9RV04A32	4079.00	6.5			26	52	120			
	9RV04B45	3955.00	8.4	Group 2	210 bar	43.2	60.4	90	3/4"	1/2"	70-210 bar
	9RV04B47	4027.00	10.8			52.8	77.6	110			
NEW	9RV04B51	4027.00	16.8		200 bar	81.6	120.8	170			
NEW	9RV04B55	4166.00	22.8		180 bar	105.6	164	220			
NEW	9RV04B59	4419.00	30.0		160 bar	144	216	300	1"	3/4"	
NEW	9RV04B63	4419.00	39.6		130 bar	192	285.2	400			



INTERNAL DRAIN (Standard Setup)

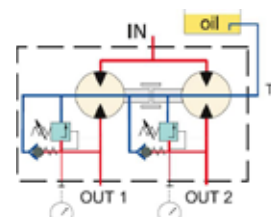
Note that with this configuration the function of anticavitation valves is annulled.



EXTERNAL DRAIN (Standard Setup)

For the correct functioning of the flow divider, **it has to be installed under the oil level.**

The drain tube has to pick up under the oil level and it has not to aspire air.

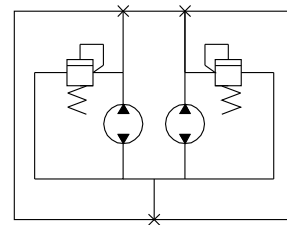


GEAR PUMPS, MOTORS & FLOW DIVIDERS

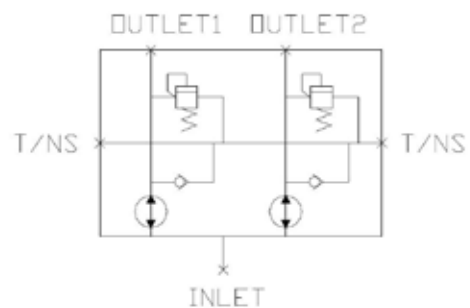
Gear Flow Dividers

2-way Rotary Gear Flow Dividers, Differential Relief

Part Number	List Price \$	Max Pressure		Inlet Min Flow	Inlet Max Flow	Port Size BSPP		Pressure drop
		Continuous	Differential			In	Out	
1FDF-1.6-L05-2	700.00	240 bar	124 bar	3 lpm	10 lpm	1/2"	3/8"	16-19 bar
1FDF-3.18-L08-2	711.00			6 lpm	20 lpm	3/4"	1/2"	
1FDF-5.29-L08-2	824.00			10 lpm	32 lpm			
1FDF-8.42-L08-2	870.00			16 lpm	42 lpm			



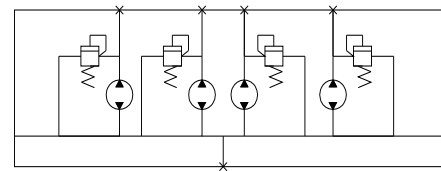
Part Number	List Price \$	Max Pressure		Inlet Min Flow	Inlet Max Flow	Port Size BSPP		Pressure drop
		Continuous	Differential			In	Out	
2FDF-14-L08-2	1648.00	220 bar	200 bar	28 lpm	70 lpm	3/4"	1/2"	11-14 bar
2FDF-25-L03-2	1679.00			50 lpm	125 lpm	1"	3/4"	



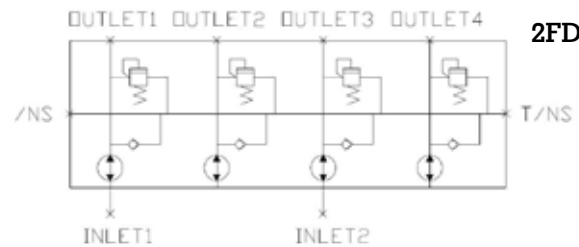
Differential Relief Valves
Standard setting 750 psi

4-way Rotary Gear Flow Dividers, Differential Relief

Part Number	List Price \$	Max Pressure		Inlet Min Flow	Inlet Max Flow	Port Size BSPP		Pressure drop
		Continuous	Differential			In	Out	
1FDF-1.6-L05-4	1370.00	240 bar	124 bar	3.2 lpm	10 lpm	1/2"	3/8"	16-19 bar
1FDF-3.18-L08-4	1473.00			6 lpm	20 lpm	3/4"	1/2"	
1FDF-5.29-L08-4	1679.00			10 lpm	32 lpm			
1FDF-8.42-L08-4	1782.00			16 lpm	50 lpm	1"	3/4"	
2FDF-14-L08-4	3739.00	220 bar	200 bar	28 lpm	140 lpm	1.1/2"		1"
2FDF-25-L03-4	3811.00			50 lpm	250 lpm			



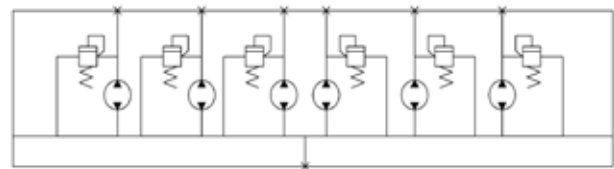
1FDF



2FDF

6-way Rotary Gear Flow Dividers, Differential Relief

Part Number	List Price \$	Max Pressure		Inlet Min Flow	Inlet Max Flow	Port Size BSPP		Pressure drop
		Continuous	Differential			In	Out	
1FDF-2.0-L05-6	2338.00	240 bar	124 bar	12 lpm	36 lpm	1/2"	3/8"	16-19 bar



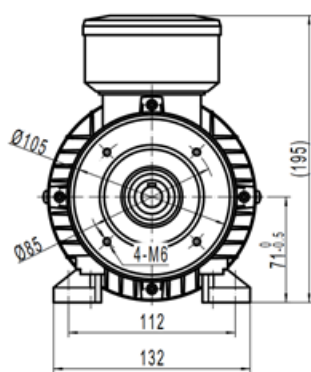
Bell Housings Frame Size Guide		158
Bell Housings - Engine & Electric Motors		159
Pump Side Couplings		161
Motor Side Couplings		162
Pilot Bore Couplings		162
Coupling Elements		163
Foot Brackets		163
Damping Rings		164
Gaskets		164
PTO Speed Increase Gearboxes		165
Electromagnetic Clutches		167
Bearing Mounts		167
Vibration Absorbers		168

PREMIUM ITALIAN PRODUCT 

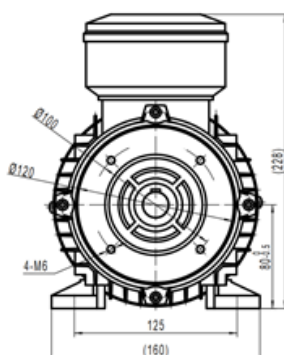
POWER TRANSMISSION

Bell Housing Frame Size Guide

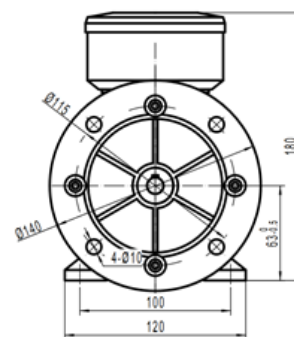
240v kW	415v kW	RPM	Frame Size	Shaft size (240v)	Shaft size (415v)
0.18	0.12-0.18	4 Pole	63	11mm	11mm
0.25-0.37	0.25-0.37		71	14mm	14mm
0.55-0.75	0.55-0.75		80	19mm	19mm
1.1-1.5	1.1-2.2		90	24mm	24mm
2.2-3.7	2.2-5.5		100/112	28mm	28mm
-	7.5-11		132	-	38mm
-	11-15		160	-	42mm
-	18.5-22		180	-	48mm
-	30-37		200	-	55mm



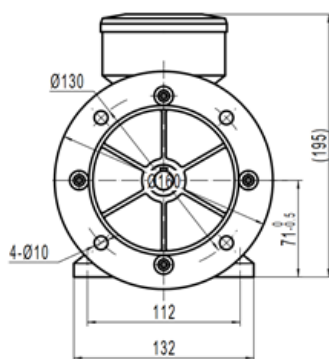
71-B34



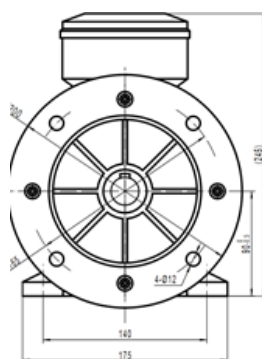
80-B34



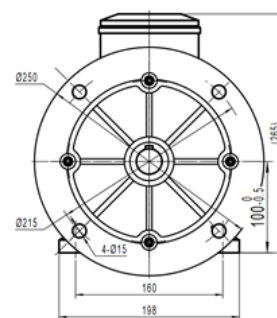
63-B3/B5



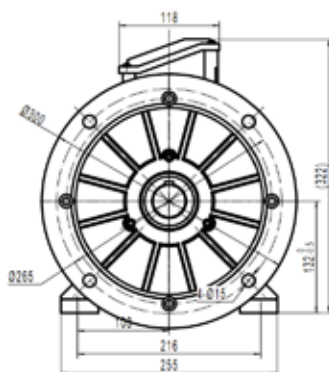
71-B3/B5



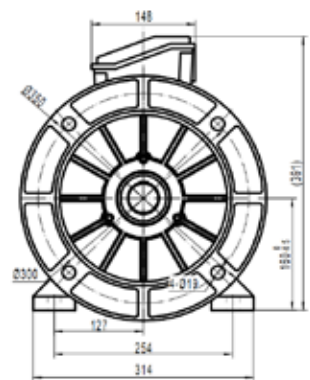
80-90 B3/B5



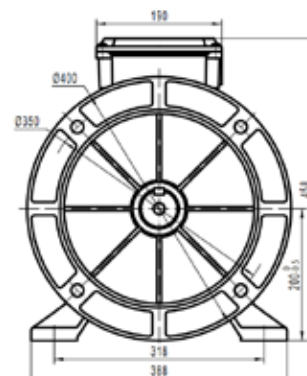
110-112 B3/B5



132-B3/B5



160-180 B3/B5



200 B3/B5

Bell Housings - Engine

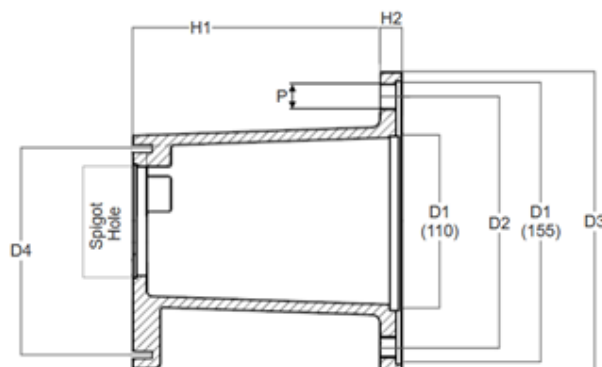
Part Number	List Price \$	Pump Size	D1 Motor Spigot	D2	D3 mm	D4	H1	H2	P
LMB110T099A002	129.00	DIN Group 1	67.5	92	110	71.9	100	80	9
LMB155T140C002M3-1	194.00		110	126	155	96.2	143	13	10
LMB155T140C002M3-2	194.00	DIN Group 2				106.4			
LMB155T140S060	201.00	SAE A Group 2							



LMB110



LMB155

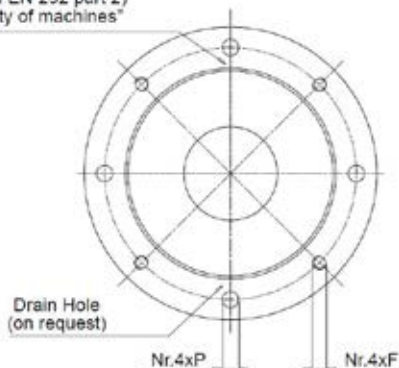


Bell Housings - Electric Motors (SAE Pumps)

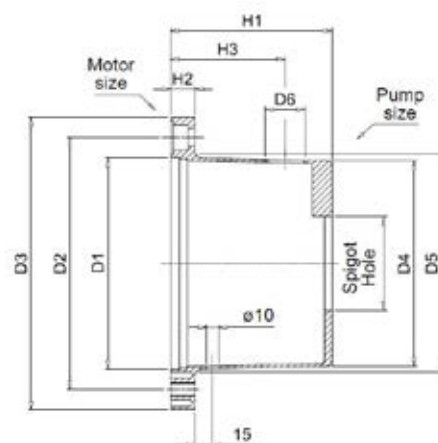
Part Number	List Price \$	Motor Size	Pump Side	D1	D2	D3	D4	D5	H1	H2	F	P
					mm							
LMC200AFSW060	108.00	80/90 B3/B5	SAE A	130	165	200	125	185	125	18	M10	11
LMC250AFRC080	345.00	D100/112 B3/B5	SAE C	180	215	250	175	186	126	19	M12	14
LMC250AFSQ060	155.00		SAE A						138			
LMC250AFSQ070	155.00		SAE B						138			
LMC300AFSX060	211.00	D132 B3/B5	SAE A	230	265	300	230	285	170	23		
LMC300AFSX070	211.00		SAE B									
LMC350AFSU070	288.00	D160/180 B3/B5	SAE C	250	300	350	240	254	194	31	M16	18
LMC350AFSU080	288.00											



Inspection Hole
Plastic threaded plug mounted
(protection according to
DIN EN 292 part 2)
"Safety of machines"

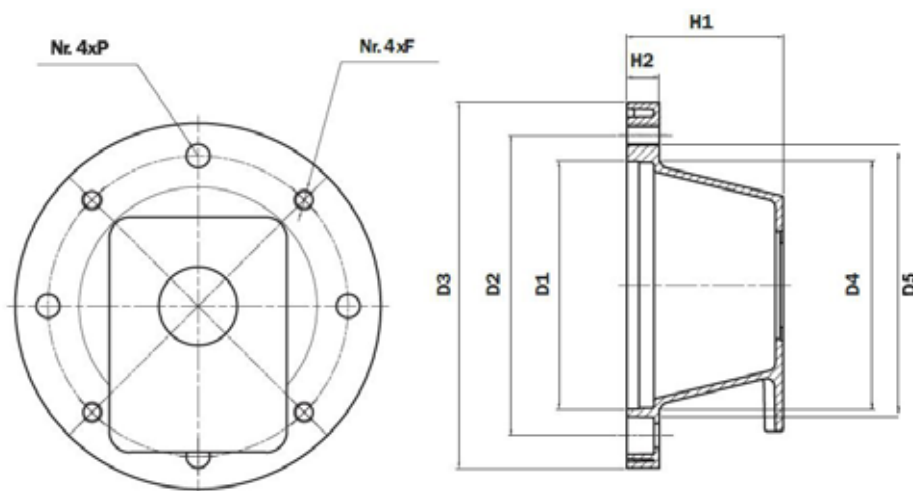


Drain Hole
(on request)



Bell Housings - Electric Motors (DIN Pumps)

Part Number	List Price \$	Motor Size	Pump Side	D1	D2	D3	D4	H1	H2	F	P
mm											
LMG105MFS05M4E	97.00	71 B34	DIN Group 05	70	85	105	74	67	9	n/a	7
LMG105MFS1M04E	97.00		DIN Group 1								
LMG120MFS05M4E	108.00	80 B34	DIN Group 05	80	100	120	84	87			
LMG120MFS1M04E	108.00		DIN Group 1								
LMG121MFS2004E	108.00		DIN Group 2								
LMG141MFS05M4E	82.00	63 B3-B5	DIN Group 05	95	115	140	100	95	13		
LMG141MFS1M04E	82.00		DIN Group 1								
LMG141MFS2004E	82.00		DIN Group 2								
LMG160MFS05M4S	57.00	71 B3/B5	DIN Group 05	110	130	160	110	70	15	M8	9
LMG160MFS1004E	57.00		DIN Group 1								
LMG161MFS1M04E	88.00							105			
LMG161MFS2004E	88.00		DIN Group 2								
LMG200MFS05M4S	77.00	80/90 B3/B5	DIN Group 05	130	165	200	135	87	18	M10	11
LMG200MFS1004E	74.00		DIN Group 1								
LMG201MFS2004E	74.00		DIN Group 2					95			
LMG250MFS1004E	95.00	110-112 B3/B5	DIN Group 1	180	215	250	185	105	22		
LMG250MFS2004E	95.00		DIN Group 2								
LMG251MFS3004E	258.00		DIN Group 3					126			
LMG300MFS2004E	160.00	132 B3-B5	DIN Group 2	230	265	300	235	145	23		
LMG300MFS3M04E	160.00		DIN Group 3								
LMG351MFS2004E	304.00	160 B3-B5	DIN Group 2	250	300	350	255	179	31	M16	18
LMG351MFS3M04E	304.00		DIN Group 3								



Pump Side Couplings

Part Number	List Price \$	Pump	Shaft Size	Series	Material
SGEA01FS05C	19.00	Group 05	7mm	0	Aluminium
SGEA01FS05M	19.00	Group 05	6mm		
SGEA01FS100	19.00	DIN Group 1	1:8 Taper		
SGEA01H06023FG	59.00	SAE A	5/8" keyed		
SGEA01H09019FG	57.00	Group 1 SAE AA	1/2" Keyed		
SGEA21FS100	28.00	DIN Group 1	1:8 Taper	2	
SGEA21FS200	28.00	DIN Group 2	1:8 Taper		
SGEA21FS300	28.00	DIN Group 3	1:8 Taper		
SGEA21H06023FG	40.00	SAE A	5/8" Keyed		
SGEA21H09023FG	40.00	Group 1 SAE AA	1/2" Keyed		
SGEA21L00050FG	54.00	SAE A	5/8" Keyed		
SGEA21C020502HFG	55.00	*	16mm		
SGEA21G01050FG	53.00	SAE A	3/4" Keyed		
SGEA21G020502EFG	54.00	SAE B	7/8" Keyed		
SGEA31FS200	42.00	DIN Group 2	1:8 Taper	3	
SGEA31FS300	42.00	DIN Group 3	1:8 Taper		
SGEA31C03040FG	56.00	*	16mm Keyed		
SGEA31L0040FG	87.00	SAE A	5/8" Keyed		
SGEA31G01040FG	72.00	SAE AA	3/4" Keyed		
SGEA31G020502EFG	66.00	SAE B	7/8" Keyed		
SGEA51FS200	62.00	DIN Group 2	1:8 Taper	5	
SGEA51FS300	62.00	DIN Group 3	1:8 Taper		
SGEA51G020502EFG	79.00	SAE B	7/8" Keyed		
SGEA51G040502FFG	79.00	SAE A	1" Keyed		
SGEA51G060502G	79.00	SAE C	1.1/4" Keyed		



Motor Side Couplings

Part Number	List Price \$	Motor	Shaft Size	Series	Material
SGEA01C02028HFG	62.00	*	16mm	0	Aluminium
SGEA01M02028FG	19.00	D71	14mm		
SGEA01M03048FG	23.00	D80	19mm		
SGEA01M04048FG	24.00	D90	24mm		
SGEA01G01050FG	33.00	Engine	3/4"		
SGEA21M03048FG	34.00	D80	19mm	2	
SGEA21M04048FG	34.00	D90	24mm		
SGEA21D02050FG	53.00	Engine	25mm		
SGEA21M05055FG	36.00	D100/112	28mm		
SGEA21G040502FFG	54.00	Engine	1"		
SGEA21L02050FG	50.00	Engine	1.1/8"		
SGEA31M06077FG	70.00	D132	38mm	3	
SGEA51M07109FG	149.00	D160	42mm	5	
SGEA51M08109FG	149.00	D180	48mm		



Pilot Bore Couplings

Part Number	List Price \$	Series	Material
SGEA0100B050	23.00	0	Aluminium
SGEA2100B050	41.00	2	
SGEA3100A060	55.00	3	
SGEA5100A070	77.00	5	



Coupling Elements

Part Number	List Price \$	Series	Outside Diameter	Max Torque	Material
EGE0	6.00	0	38mm	20Nm	Oil-resistant rubber (shore hardness 87)
EGE2	10.00	2	65mm	190Nm	
EGE3	21.00	3	80mm	380Nm	
EGE5	35.00	5	103.5mm	620Nm	
EGE6	155.00	6	120mm	860Nm	



Foot Brackets

Part Number	List Price \$	Series	Mount	Motor Flange	Material
PDMA160	98.00	D71	135x80 - 8.5mm	B5	Pressure Diecast Aluminium
PDMA200	113.00	D80-90	175x98 - 11.5mm		
PDMA250	134.00	D100-110	220x130 - 13.5mm		
PDMA300	206.00	D132	270x160 - 13.5mm		
PDMA350	417.00	D160-180	310x200 - 13mm		



Damping Rings

Part Number	List Price \$	Series	Motor Flange	Noise Reduction
ANMA200	304.00	D80-90	B5	Up to 5 db
ANMA250	361.00	D100-110		
ANMA300	489.00	D132		
ANMA350	628.00	D160-180		



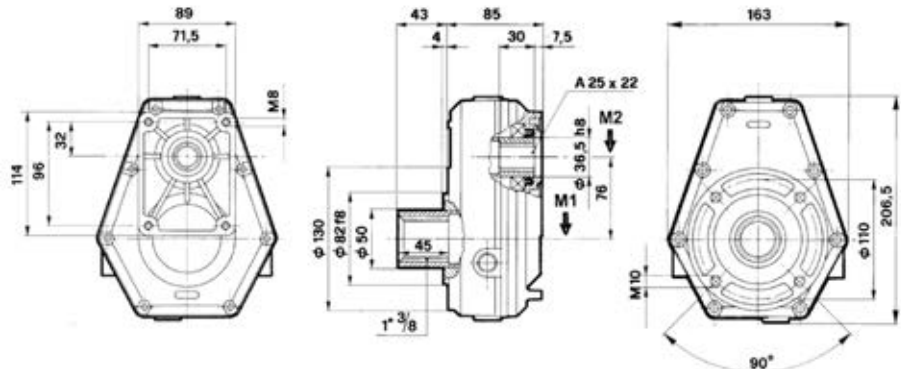
Gaskets

Part Number	List Price \$	Bell Housing	Pump Size
GUMP120	3.00	LMG120	
GUMP140	4.50	LMG140	
GUMP160	4.00	LMG160	
GUMP200	5.00	LMC/LMG200	
GUMP250	8.00	LMC/LMG250	
GUMP300	12.00	LMC/LMG300	
GUMP350	18.00	LMC/LMG350	
GUPP001	2.00		Group 05
GUPP002	2.00		DIN Group 1
GUPP004	3.00		DIN Group 2
GUPP005	4.00		DIN Group 3



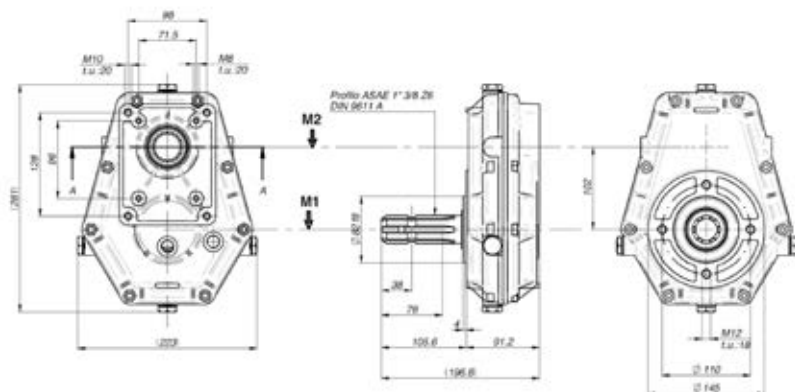
60000 Series - 10kW

Part Number	List Price \$	Description
60001-4	510.00	Step Up Gearbox, 3:1 ratio, extended male shaft, DIN GP2 pump
60002-4	510.00	Step Up Gearbox, 3:1 ratio, extended female shaft, DIN GP2 pump
60004-4	567.00	Step Up Gearbox, 3:1 ratio, extended female shaft quick release, DIN GP2 pump
10005	21.00	Coupling DIN 5482B, 25x22, DIN GP2 1:8 taper
10026	21.00	Coupling Vivoil Group 2 DIN, 25x22, 4mm key, 1:8 taper
19060	67.00	Seal kit

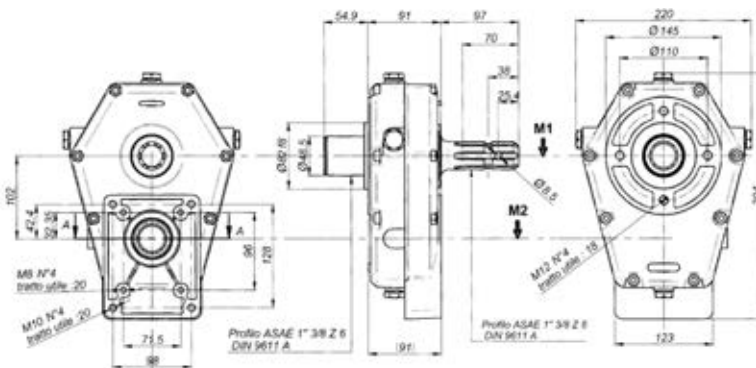


71000 Series - 20kW

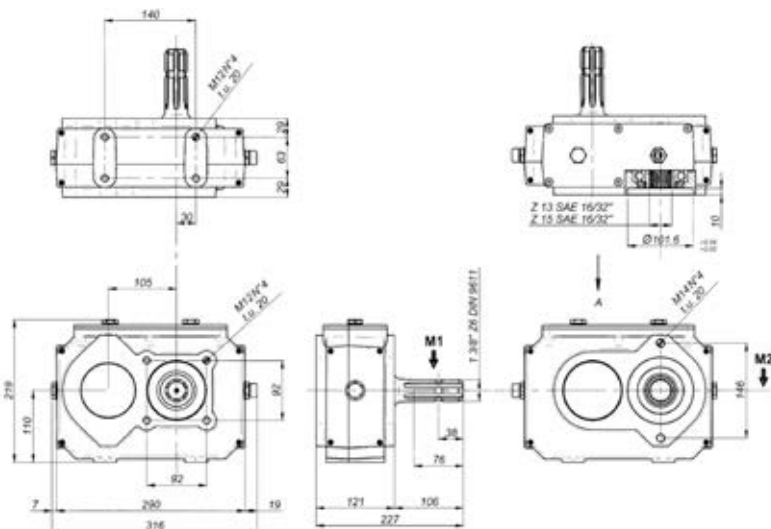
Part Number	List Price \$	Description
71001-4	690.00	Step Up Gearbox, 3:1 ratio, extended male shaft, DIN GP2/3 pump
71002-4	690.00	Step Up Gearbox, 3:1 ratio, extended female shaft, DIN GP2/3 pump
71004-4	773.00	Step Up Gearbox, 3:1 ratio, extended female shaft quick release, DIN GP2/3 pump
10012	24.00	Coupling DIN 5482B, 35x31, DIN GP2 1:8 taper
10014	24.00	Coupling DIN 5482B, 35x31, DIN GP3 1:8 taper
10044	26.00	Coupling Vivoil Group 2 DIN, 35x31, 4mm key, 1:8 taper
15002	77.00	Coupling DIN 5482B, 35x31, SAE B 7/8, keyed shaft
35501	77.00	Coupling DIN 5482B, 35x31, SAE B 7/8, 16/32" DP, 13T spline
35513	102.00	Coupling DIN 5482B, 35x31, SAE A 5/8, 16/32" DP, 9T spline
96100	206.00	Adaptor plate 71000 series, to SAE A Mount
96101	263.00	Adaptor plate 71000 series, to SAE B Mount
19071	72.00	Seal kit



Part Number	List Price \$	Description
70012-4	1514.00	Pump over gear cast iron male shaft, 1:3 ratio, 37kW
70013-4	1514.00	Pump over gear cast iron female shaft, 1:3 ratio, 37kW
70015-4	1576.00	Pump over gear female shaft quick release, 1:3 ratio, 37kW
10012	24.00	Coupling DIN 5482B, 35x31, DIN GP2 1:8 taper
10014	24.00	Coupling DIN 5482B, 35x31, DIN GP3 1:8 taper
10044	26.00	Coupling Vivoil Group 2 DIN, 35x31, 4mm key, 1:8 taper
15002	77.00	Coupling DIN 5482B, 35x31, SAE B 7/8, keyed shaft
35501	77.00	Coupling DIN 5482B, 35x31, SAE B 7/8, 16/32" DP, 13T spline
35513	102.00	Coupling DIN 5482B, 35x31, SAE A 5/8, 16/32" DP, 9T spline
96100	206.00	Adaptor plate 71000 series, to SAE A Mount
96101	263.00	Adaptor plate 71000 series, to SAE B Mount
19070	72.00	Seal kit



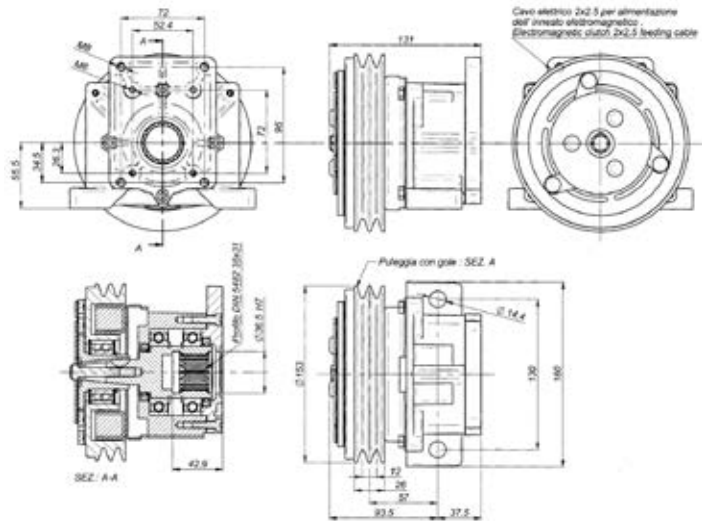
Part Number	List Price \$	Description
97601-7/13	2318.00	Pump over gear male shaft, 1:3.8 ratio, 68kW, SAE B 13T direct mount



Electro-Magnetic Clutches

Part Number	List Price \$	Voltage	Amp Draw	Max Speed	Drive Coupling Required
30901	1313.00	12v DC	3.33a	5000 rpm	10010 (GP1), 10012 (GP2)
30903	1313.00	24v DC	1.26a		

Part Number	List Price \$	Description
10010	45.00	Coupling DIN 5482B, 35x31, DIN GP1 1:8 taper
10012	24.00	Coupling DIN 5482B, 35x31, DIN GP2 1:8 taper
10044	26.00	Coupling Vivoil Group 2 DIN, 35x31, 4mm key, 1:8 taper



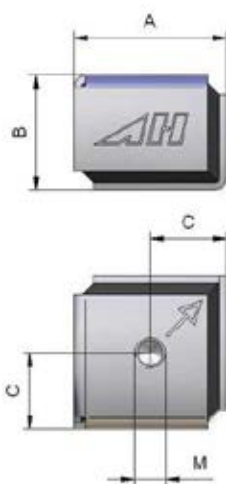
Bearing Mounts

Part Number	List Price \$	Description
25601	258.00	Bearing mount GP1, taper to 18mm key shaft output + coupling 10003
25603	314.00	Bearing mount GP2, taper to 22mm key shaft output + coupling 10035
25604-4	680.00	Bearing mount GP3, taper to 25mm key shaft output + coupling 10014
10003	23.00	Coupling DIN 5482B, 25x22, DIN Group 1 1:8 taper
10005	21.00	Coupling DIN 5482B, 25x22, DIN Group 2 1:8 taper
10014	24.00	Coupling DIN 5482B, 35x31, DIN Group 3 1:8 taper
10026	21.00	Coupling Vivoil Group 2 DIN, 25x22, 4mm key, 1:8 taper
10044	26.00	Coupling Vivoil Group 2 DIN, 35x31, 4mm key, 1:8 taper



Rubber Vibration Absorbers

Part Number	List Price \$	Description	Material	Weight kg	M	A	B mm	C
MDGQ403008IIK	24.00	40x40x30 M8	Zinc coated steel and natural rubber	0.127	M8 x 10	40	30	20
MDGQ504510IIK	57.00	50x50x45 M10		0.280	M10 x 12	50	45	25
MDGQ755512IIK	97.00	75x75x55 M12		0.659	M12 x 15	75	55	37.5
MDGQ1007516IIK	405.00	100x100x75 M16		1.920	M16 x 16.5	100	75	50



*Assembly note:
all 4 arrows have to point
towards the middle*



**Contact us for further
technical information**

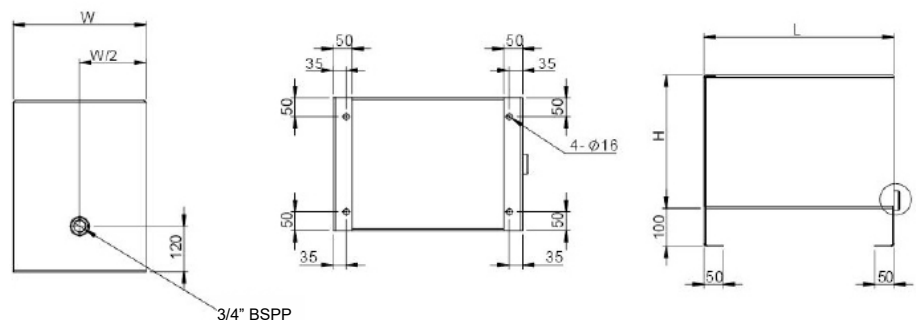
Industrial Steel Tanks		170
Tank Lid Gaskets		170
Tank Lids		170
Magnetic Drain Plugs & Filter Rods		172
Filler & Threaded Breathers		173
Filler & Threaded Breathers		174
Suction Strainers		175
Diffusers		176
Venting Plugs		176
Sight Gauges		177
Level Gauges		179
Level Gauges		181
Electrical Level Gauges		182

PREMIUM ITALIAN PRODUCT 

AUSTRALIAN MADE PRODUCT 

Industrial Steel Tanks

Part Number	List Price \$		Useable Litres	Volume	Tank Size (mm)			Total Unit Height (mm)
	Uncoated	Coated			L	W	H	
SE10LT (aluminium)	216.00	n/a	10 L	12 L	310	240	207	225
IT-25	639.00	788.00	25 L	28 L	360	360	220	225
IT-40	803.00	953.00	40 L	60 L	500	350	350	450
IT-70	958.00	1154.00	70 L	100 L	600	425	400	500
IT-120	1463.00	1700.00	120 L	165 L	700	500	475	575
IT-200	1524.00	1849.00	200 L	260 L	800	600	550	650
IT-300	1761.00	2122.00	300 L	380 L	900	700	600	700
IT-400	2225.00	2611.00	400 L	500 L	900	700	800	900



Tank Lid Gaskets

Part Number	List Price \$	Material	Size
GUS10	17.00	Paper	To suit 10 L tank
ITG-25C	57.00	Cork	To suit 25 L tank
ITG-40C	67.00		To suit 40 L tank
ITG-70C	98.00		To suit 70 L tank
ITG-120C	113.00		To suit 120 L tank
ITG-200C	196.00		To suit 200 L tank
ITG-300C	232.00		To suit 300/400 L tank

Tank Lids - Uncoated and Uncut

Part Number	List Price \$	Description
ITL10	113.00	Lid for 10 L tanks - uncoated and lid bolt holes only
ITL25	124.00	Lid for 25 L tanks - uncoated and lid bolt holes only
ITL40	124.00	Lid for 40 L tanks - uncoated and lid bolt holes only
ITL70	134.00	Lid for 70 L tanks - uncoated and lid bolt holes only
ITL120	155.00	Lid for 120 L tanks - uncoated and lid bolt holes only
ITL200	180.00	Lid for 200 L tanks - uncoated and lid bolt holes only
ITL300	288.00	Lid for 300/400 L tanks - uncoated and lid bolt holes only

Suction Butterfly Valves - see pages 308



MADE IN
AUSTRALIA

TANKS & TANK ACCESSORIES

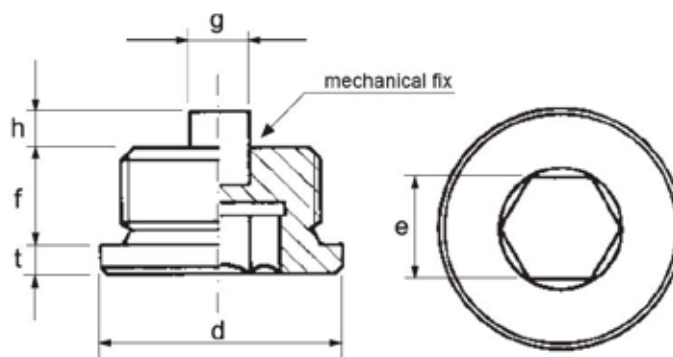
Tank Lids

Tank Lids - Coated and Cut

Part Number	List Price \$	Tank Size	Motor Size	Breather	Filter	Manifold
ITL10-90-M3	129.00	10 L	D80-90	FB3	n/a	2-6 CT3 valves
ITL10-90-M3-S3						P&T or single CT3 valve
ITL10-RFB	113.00		n/a		TIFP04	n/a
ITL25-71-M3	185.00	25 L	D71	FB3	FIF04	2-6 CT3 valves
ITL25-71-S3						P&T or single CT3 valve
ITL25-90-M3			D80-90			2-6 CT3 valves
ITL25-90-S3						P&T or single CT3 valve
ITL25-100-M3			D100-112			2-6 CT3 valves
ITL25-100-S3						P&T or single CT3 valve
ITL25-RFB			n/a	FB6		n/a
ITL40-71-M3	185.00	40 L	D71	FB3	FIF-04	2-6 CT3 valves
ITL40-71-S3						P&T or single CT3 valve
ITL40-90-M3			D80-90			2-6 CT3 valves
ITL40-90-S3						P&T or single CT3 valve
ITL40-100-M3			D100-112			2-6 CT3 valves
ITL40-100-S3						P&T or single CT3 valve
ITL40-RFB			n/a	FB6	TIFP06	n/a
ITL70-90-M3	206.00	70 L	D80-90	FB6	FIF-06/08	2-6 CT3 valves
ITL70-90-S3						P&T or single CT3 valve
ITL70-100-M3			D100-112			2-6 CT3 valves
ITL70-100-S3						P&T or single CT3 valve
ITL70-132-M3			D132			2-6 CT3 valves
ITL70-132-S3						P&T or single CT3 valve
ITL70-RFB			n/a		TIFP06	n/a
ITL120-100-M3	270.00	120 L	D100-112	FB6	FIF-06/08	2-6 CT3 valves
ITL120-100-S3						P&T or single CT3 valve
ITL120-132-M3			D132			2-6 CT3 valves
ITL120-132-S3						P&T or single CT3 valve
ITL120-160-M5			D160-180		FIF-10	2-6 CT3 valves
ITL120-160-S5						P&T or single CT3 valve
ITL120-RFB			n/a		TIFP10	n/a
ITL200-132-M5	290.00	200 L	D132	FB6	FIF-10	2-6 CT5 valves
ITL200-132-S5						P&T or single CT5 valve
ITL200-160-M5			D160-180			2-6 CT5 valves
ITL200-160-S5						P&T or single CT5 valve
ITL200-RFB			n/a		TIFP10	n/a
ITL300-160-M5	391.00	300-400 L	D160-180	FB6	FIF-10	2-6 CT5 valves
ITL300-160-S5						P&T or single CT5 valve
ITL300-RFB			n/a		TIFP10	n/a

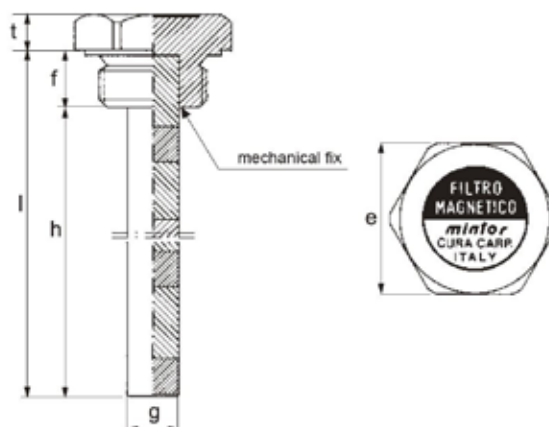
NEW Magnetic Drain Plugs

Part Number	List Price \$	Thread	Description	g	h	f	t	d
mm								
TCEM0G	12.00	1/8" BSPP	Magnetic oil – drain plug with HEX head (supplied with metal washer)	3	4	8	3	14
TCEM1G	12.00	1/4" BSPP		5	5	12	3	18
TCEM2G	13.00	3/8" BSPP		5	5	12	3	22
TCEM3G	18.00	1/2" BSPP		6	5	14	4	26
TCEM4G	28.00	3/4" BSPP		10	6	16	4	32
TCEM5G	33.00	1" BSPP		10	6	16	5	40
TCEM6G	64.00	1.1/4" BSPP		15	10	16	5	49



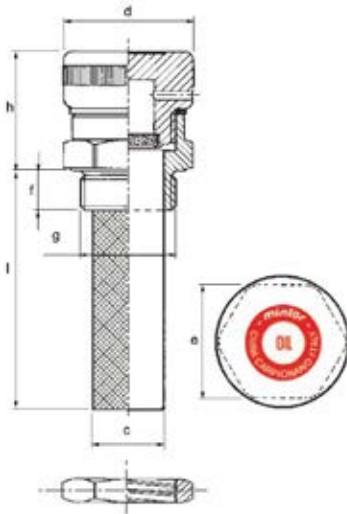
NEW Magnetic Filter Rods

Part Number	List Price \$	Thread	Description	t	f	l	h	g
mm								
FMC1G	76.00	3/8" BSPP	Magnetic oil – drain plug with HEX slot (supplied with metal washer)	7	10	80	70	9
FMC2G	92.00	1/2" BSPP		8.5	10	95	85	12
FMC3G	121.00	3/4" BSPP		9.5	12	102	90	17
FMC4G	152.00	1" BSPP		9.5	14	104	90	17



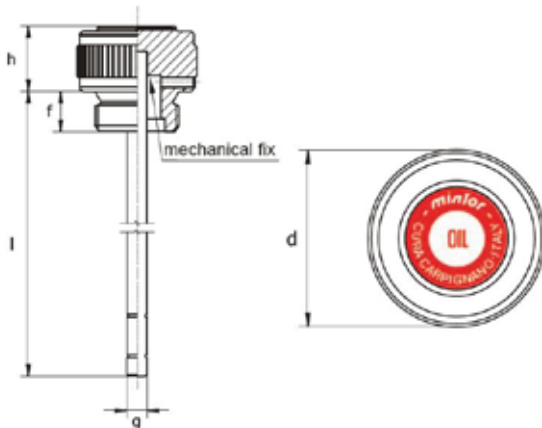
NEW Filler Breathers

Part Number	List Price \$	Thread	Micron		Material	d	g	f	h	i	c	e
mm												
TRTCSF/Z	78.00	1" BSPP	Filler	800 µm	Aluminium	45	33.3	14	42	82	25	40
			Breather	40 µm								
TRTCSF/Z-NUT	9.00	Backing nuts to suit M12x1.75 thread (sold individually)										



NEW Threaded Breathers

Part Number	List Price \$	Thread	Material	h	f	i	g	d
mm								
TCLS/Z1G	15.00	1/4" BSPP	Aluminium	12	8	120	5	22
TCLS/Z2G	16.00	3/8" BSPP		13.5	10	170	5	26
TCLS/Z3G	19.00	1/2" BSPP		16.5	10	170	5	30
TCLS/Z4G	26.00	3/4" BSPP		21.5	12	200	5	40
TCLS/Z5G	36.00	1" BSPP		21.5	14	200	5	45



TANKS & TANK ACCESSORIES

Filler Breathers & Threaded Breathers

Filler Breathers

Part Number	List Price \$	Max Flow	Micron	Mount	Material
FB3	25.00	90 lpm	10 µm	3 bolt - PCD 41.3mm	Chrome Steel
FB6	41.00	400 lpm		6 bolt - PCD 71.5mm	Chrome Steel
FSBP	52.00			6 bolt - PCD 71.5mm	Polyamide
FB6LT	48.00			6 bolt - PCD 71.5mm, lock tab	Chrome Steel
FB6HN	54.00			6 bolt - PCD 71.5mm, high neck	Chrome Steel
FB6P5	59.00			6 bolt - PCD 71.5mm, pressure valve 5psi	Chrome Steel
FB6SM	74.00			6 bolt - side mount	Ch.Steel/Aluminium
PB25	31.00	720 lpm	40 µm	Push fit 1-1/2"	Chrome Steel



Threaded Breathers

Part Number	List Price \$	Max Flow	Micron	Thread	Material
TB14	21.00	90 lpm	10 µm	1/4" BSPP	Chrome/Steel
TB38	21.00			3/8" BSPP	
TB12	37.00	1/2" BSPP			
TB34	37.00	3/4" BSPP			
TB34P5 (pressurised 5psi)	55.00	1" BSPP			
TB1	42.00	1.1/4" BSPP		Polyamide	
TB114	70.00	1.1/2" BSPP			
TB112	70.00	2" BSPP			
TB2	92.00	2.1/2" BSPP			
TB212	132.00				
ABP03B	8.00	n/a	40 µm		3/8" BSPP
ABP04B	9.00				1/2" BSPP
ABP06B	12.00			3/4" BSPP	
ABP08B	15.00			1" BSPP	

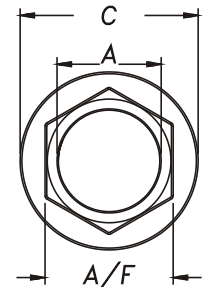
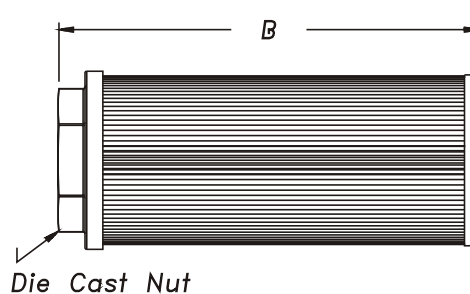


Suction Strainer

Part Number	List Price \$	Micron	Flow	A	B	C mm	A/F
SS14	17.00	149 μ m	8 lpm	1/4" BSPP	90	46	24
SS38	19.00		12 lpm	3/8" BSPP	90	46	24
SS12	20.00		20 lpm	1/2" BSPP	105	46	30
SS34	25.00		28 lpm	3/4" BSPP	109	64	35
SS1	27.00		40 lpm	1" BSPP	139	64	46
SS114	38.00		60 lpm	1.1/4" BSPP	139	86	51
SS112	48.00		120 lpm	1.1/2" BSPP	200	86	60
SS2	57.00		160 lpm	2" BSPP	235	100	70
SS212	99.00		300 lpm	2.1/2" BSPP	211	150	90
SS3	122.00		400 lpm	3" BSPP	272	150	100

Suction Strainer with Relief

Part Number	List Price \$	Micron	Flow	A	B	C mm	A/F
SS14B3	23.00	149 μ m	8 lpm	1/4" BSPP	90	46	24
SS38B3	25.00		12 lpm	3/8" BSPP	90	46	24
SS12B3	27.00		20 lpm	1/2" BSPP	105	46	30
SS34B3	33.00		28 lpm	3/4" BSPP	109	64	35
SS1B3	36.00		40 lpm	1" BSPP	139	64	46
SS114B3	49.00		60 lpm	1.1/4" BSPP	139	86	51
SS112B3	60.00		80 lpm	1.1/2" BSPP	168	86	60

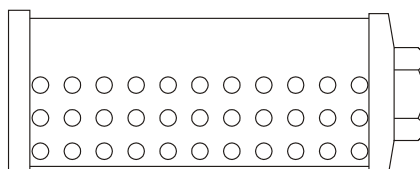
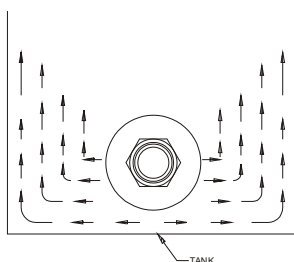


TANKS & TANK ACCESSORIES

Diffusers & Venting Plugs

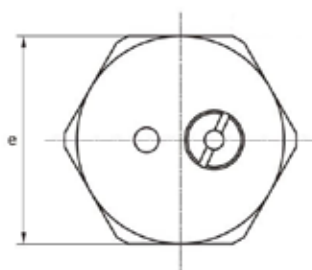
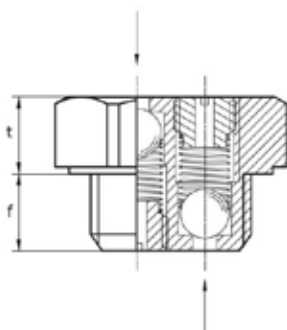
Diffusers

Part Number	List Price \$	Size A	Flow
DIF34	28.00	3/4" BSPP	50 lpm
DIF1	39.00	1" BSPP	100 lpm
DIF114	42.00	1.1/4" BSPP	200 lpm



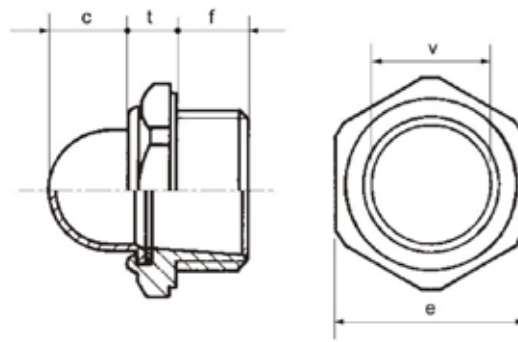
NEW Venting Plug

Part Number	List Price \$	Thread	Description	Material	t	f	e
TSVV1G	23.00	1/4" BSPP	Normally closed to atmosphere With 2-way adjustable venting Pressure 0-10 Bar	Aluminium	10	10	17
TSVV2G	24.00	3/8" BSPP			10	10	22
TSVV3G	30.00	1/2" BSPP			10	10	27

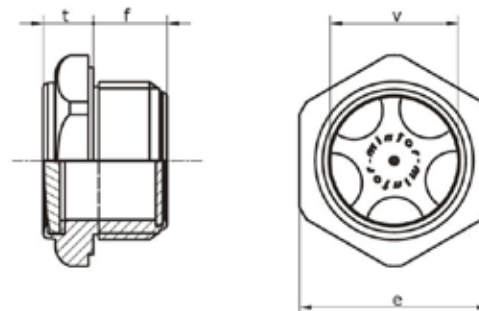


NEW Sight Gauges

Part Number	List Price \$	Thread	Material	f	t	v	e	c
				mm				
IFC0G	14.00	3/8" BSPP	Aluminium	9	6	16	24	9
IFC1G	16.00	1/2" BSPP		10	9.5	16	27	9
IFC2G	18.00	3/4" BSPP		11	10	16	32	9
IFC3G	25.00	1" BSPP		14	10	19	40	13
IFC4G	48.00	1.1/4" BSPP		15	10.5	25	50	17
IFC5G	55.00	1.1/2" BSPP		15	10.5	33	55	23
IFC6G	104.00	2" BSPP		15	14	36	70	24

**NEW** Sight Gauges

Part Number	List Price \$	Thread	Material	f	t	v	e
				mm			
TLA1G	11.00	1/4" BSPP	Aluminium	8	7	10	17
TLA2G	12.00	3/8" BSPP		10.5	7	13	22
TLA3G	14.00	1/2" BSPP		11	9	16	27
TLA4G	16.00	3/4" BSPP		12	9	21	32
TLA5G	23.00	1" BSPP		15.5	10	27	40
TLA6G	44.00	1.1/4" BSPP		15	10	37	40
TLA7G	51.00	1.1/2" BSPP		15	10	40	55
TLA8G	99.00	2" BSPP		17	14	50	70

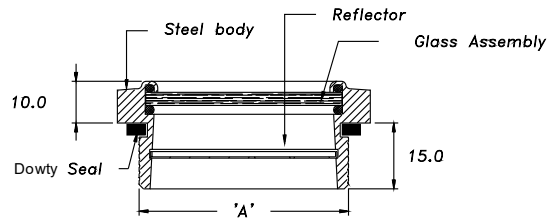
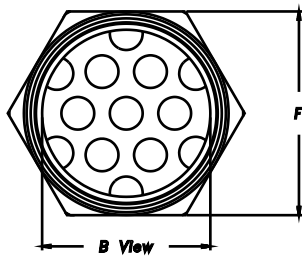


TANKS & TANK ACCESSORIES

Sight Gauges

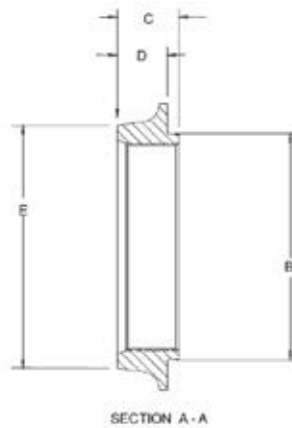
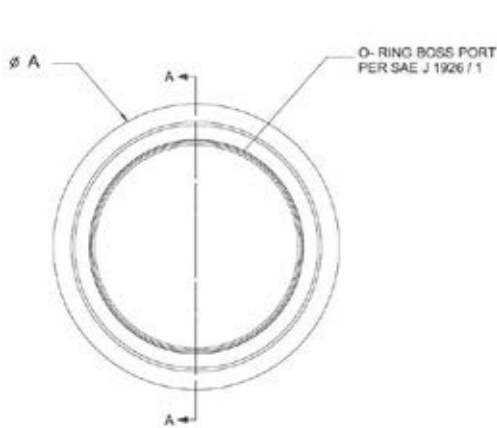
Sight Gauges

Part Number	List Price \$	Material	A	B	F
SG38	12.00	Steel	3/8" BSPP	10mm	22mm
SG12	14.00		1/2" BSPP	14mm	25mm
SG34	17.00		3/4" BSPP	20mm	32mm
SG1	19.00		1" BSPP	24mm	38mm
SG114	24.00		1.1/4" BSPP	33mm	44mm
SG112	28.00		1.1/2" BSPP	39mm	55mm



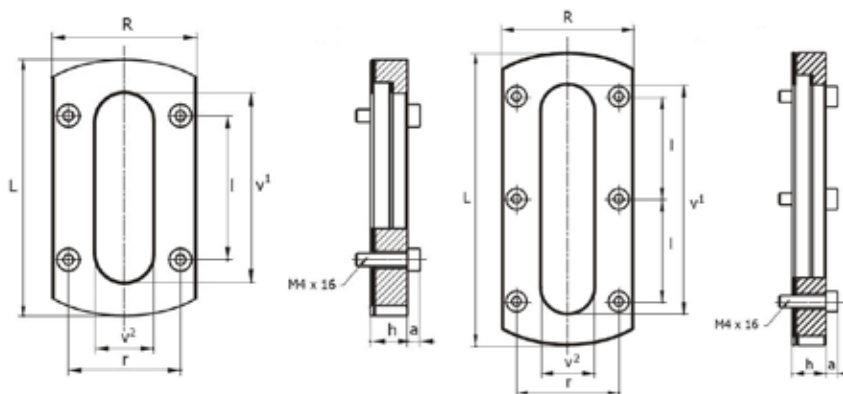
Sight Gauge Weld Flanges

Part Number	List Price \$	Material	A	B	C mm	D	E
SGWN38	8.00	Steel	38.10	23.62	14.22	7.87	25.40
SGWN12	8.00		54.10	35.05	17.52	11.17	36.57
SGWN34	12.00		54.10	35.05	17.52	11.17	36.57
SGWN1	16.00		60.45	42.16	19.05	12.70	44.45
SGWN114	18.00		68.32	50.80	19.05	12.70	54.10
SGWN112	23.00		76.20	57.15	21.74	19.05	60.45

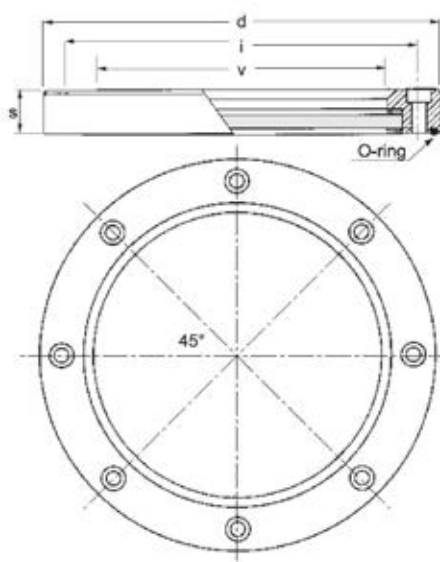


NEW Flanged Vertical Level Gauge

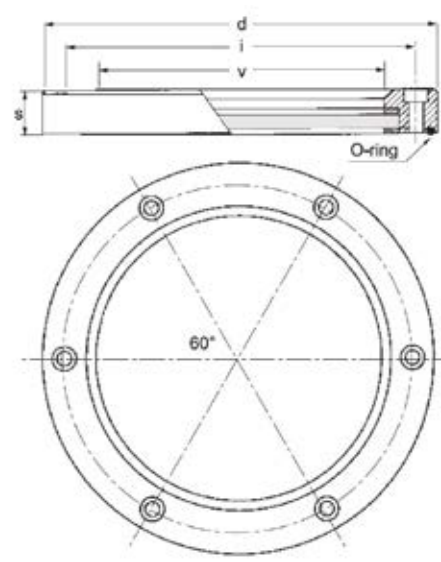
Part Number	List Price \$	Material	L	R	I	R	V1	V2	h	a
mm										
LVF 60	139.00	Aluminium	60	45	28	35	39	18	11.5	4
LVF 80	164.00		80	45	45	35	59	18	11.5	4
LVF 100	173.00		100	45	35	35	78	18	11.5	4

**NEW** Inspection Port Hole

Part Number	List Price \$	Material	v	d	i	s
mm						
OBLO-100	165.00	Aluminium housing	100	150	130	19.5
OBLO-148	225.00		148	202	180	21.5



OBLO-100

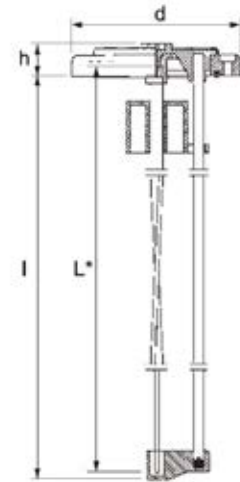


OBLO-148

NEW Vertical Level Indicator (Float System)

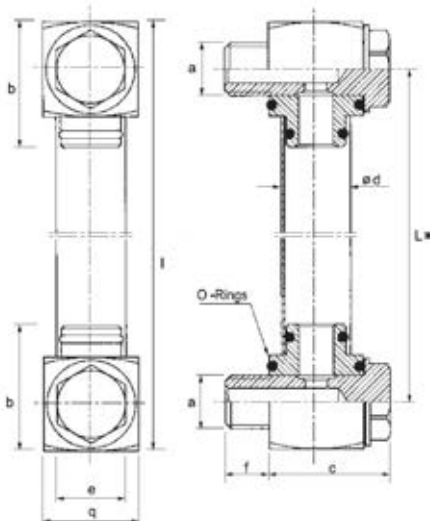
Part Number	List Price \$	Material	L	d	h mm	l	r
LGF681	188.00	Flange cover aluminium	200	80	16	203	68
LGF682	190.00		250	80	16	253	68
LGF683	191.00		300	80	16	303	68
LGF684	193.00		350	80	16	353	68
LGF685	195.00		400	80	16	403	68

Note: When choosing length, the gauge must not be below the pump suction.



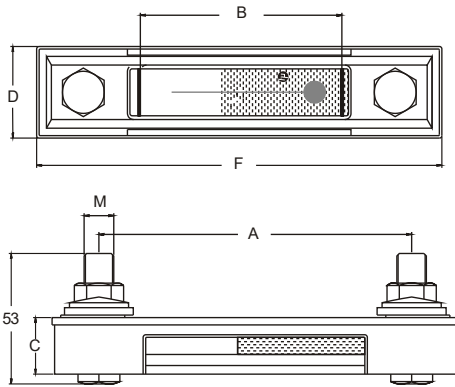
NEW Level Gauge

Part Number	List Price \$	Material	a	L	b	e	q	d	c	f	l
mm											
GLV1G	186.00	Aluminium	M12x1.75	500	40	22	30	22	43	10	530
GLV2G	220.00			1000	40	22	30	22	43	10	1030
GLV-2IDAD2OS	1.00	Backing nuts to suit M12x1.75 thread (sold individually)									



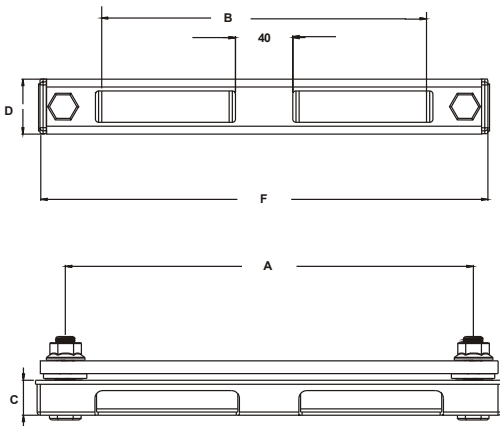
Level Gauges 3" & 5" (76mm & 127mm)

Part Number	List Price \$	Type	A	B	C mm	D	F	M
LG1	30.00	Level	76.2	32	23	35	111	M10
LGT1	36.00	Level - Temperature						
LG2	33.00	Level	127	76	23	35	162	M12
LGT2	38.00	Level - Temperature						



Level Gauges 10" (254mm)

Part Number	List Price \$	Type	A	B	C mm	D	F	M
LG3	52.00	Level	254	200	23	35	289	M12
LGT3	58.00	Level - Temperature						

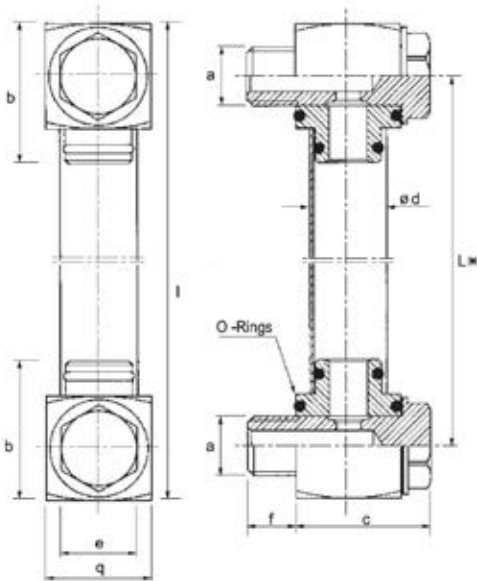


TANKS & TANK ACCESSORIES

Electrical Level Gauges

NEW Electrical Level Gauges

Part Number	List Price \$	Material	a	L	e	q	d	c	f	s	l
mm											
GLVE1G	340.00	Aluminium	M12x1.75	500	22	30	22	43	10	65	530
GLVE2G	381.00		M12x1.75	1000	22	30	22	43	10	65	1030
GLV-2IDAD2OS	1.00	Backing nuts to suit M12x1.75 thread (sold individually)									

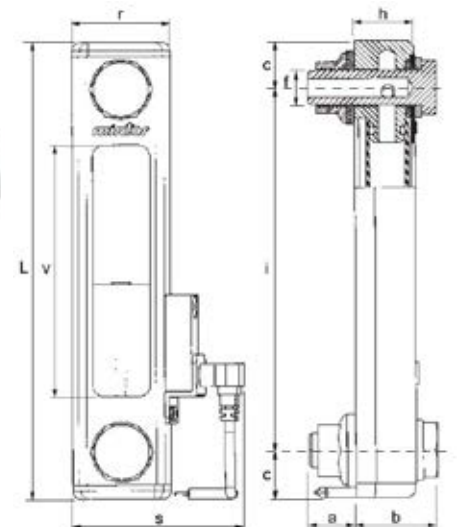


Electrical Information	
Contact	N/O
Sensing	Min and max oil level
AC	140v AC
DC	200v DC
Amps	0.5a
Watts	10w

NEW Electrical Level Gauges

Part Number	List Price \$	Material	L	r	v	C	i	f	h	a	b	s
mm												
PLE2	305.00	Aluminium	160	34	88	16.5	127	M12	21.5	16	29	59
PLE3	362.00		287	34	215	16.5	254	M12	21.5	16	29	59

Electrical Information	
Contact	N/O
Sensing	Min oil level
Lead Length	2500mm
AC	250v AC
DC	250v DC
Amps	0.5a
IP	IP67



Electrical Level Gauges 3"

Part Number	List Price \$	M	A	H	Description
LVK10AM121SSP01	319.00	M12	76mm	108mm	Low level - N/O switch
LVK10AM121PSP01	541.00				Low level - N/O switch, PT100 temp sensor

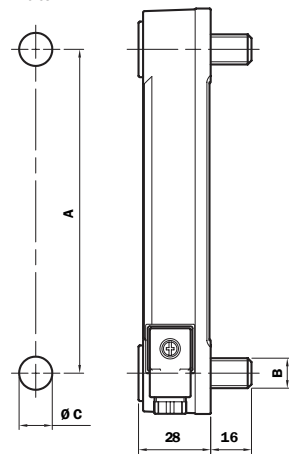
Electrical Level Gauges 5"

Part Number	List Price \$	M	A	H	Description
LVK20AM121SSP01	371.00	M12	127mm	159mm	Low level - N/O switch
LVK20AM121PSP01	567.00				Low level - N/O switch, PT100 temp sensor
LVK20AM121T2P01	541.00				Low level - N/O switch, 60° NO temp sensor

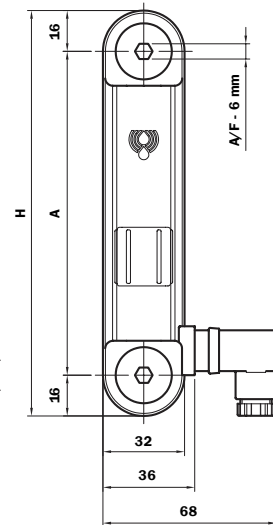
Electrical Level Gauges 10"

Part Number	List Price \$	M	A	H	Description
LVK30AM121SSP01	515.00	M12	254mm	286mm	Low level - N/O switch
LVK30AM121PSP01	692.00				Low level - N/O switch, PT100 temp sensor
LVK30AM121T2P01	670.00				Low level - N/O switch, 60° NO temp sensor
LVK30AM121T3P01	670.00				Low level - N/O switch, 70° NO temp sensor

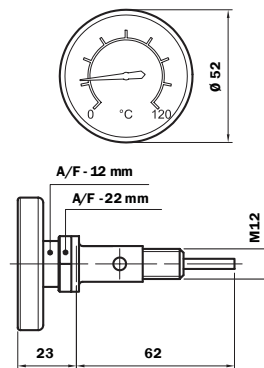
Part Number	List Price \$	Description
TV12	299.00	Visual temperature gauge

Reservoir
holes

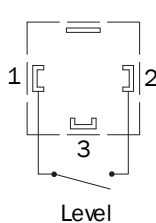
PS type



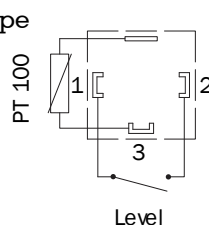
Sensor thermometer



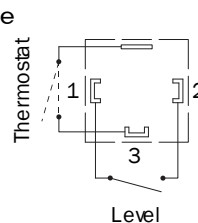
SS type



PS type



T2 type



Pressure Gauges		186
Digital Pressure Gauges		186
Pressure Gauge Accessories		188
Pressure Gauge Kits		189
Test Couplings		190
Gauge Isolators		190
Gauge Adaptors		191
Hose Assembly		191
Test Hoses		192
Pressure Switches & Accessories		195

PREMIUM ITALIAN PRODUCT 

GAUGES, TEST COUPLINGS & PRESSURE SWITCHES

Pressure Gauges

1.5" Gauges Radial Entry - 1/4" BSPP

Part Number	List Price \$	Pressure Range
121-21-122-V-0Z-SK-1	57.00	-1 bar
121-21-122-00010J-SK	52.00	0-10 bar
121-21-122-00160J-SK	52.00	0-160 bar
121-21-122-00250J-SK	52.00	0-250 bar
121-21-122-00315J-SK	52.00	0-315 bar



2.5" Gauges Radial Entry - 1/4" BSPP

Part Number	List Price \$	Pressure Range
ILX6305RL0/10	50.00	0-10 bar
ILX6305RL0/16	50.00	0-16 bar
ILX6305RL0/25	50.00	0-25 bar
ILX6305RL0/40	50.00	0-40 bar
ILX6305RL0/60	50.00	0-60 bar
ILX6305RL0/100	50.00	0-100 bar
ILX6305RL0/160	50.00	0-160 bar
ILX6305RL0/250	50.00	0-250 bar
ILX6305RL0/315	50.00	0-315 bar
ILX6305RL0/400	50.00	0-400 bar
ILX6305RL0/600	62.00	0-600 bar
ILX6305RL0/700	95.00	0-700 bar



2.5" Digital Gauges Radial Entry - 1/4" BSPP

Part Number	List Price \$	Pressure Range
SDI2.5-L-3-4-100	663.00	0-100 bar
SDI2.5-L-3-4-400	663.00	0-400 bar
SDI2.5-L-3-4-700	663.00	0-700 bar



4.0" Gauges Radial Entry - 1/2" BSPP

Part Number	List Price \$	Pressure Range
ILX1005RLO/10	129.00	0-10 bar
ILX1005RLO/16	129.00	0-16 bar
ILX1005RLO/25	129.00	0-25 bar
ILX1005RLO/40	129.00	0-40 bar
ILX1005RLO/60	129.00	0-60 bar
ILX1005RLO/100	129.00	0-100 bar
ILX1005RLO/160	129.00	0-160 bar
ILX1005RLO/250	129.00	0-250 bar
ILX1005RLO/315	129.00	0-315 bar
ILX1005RLO/400	129.00	0-400 bar
ILX1005RLO/600	129.00	0-600 bar
ILX1005RLO/700	191.00	0-700 bar



1.5" Gauges Rear Entry - 1/4" BSPP

Part Number	List Price \$	Pressure Range
124-21-122-V-0Z-SK-1	62.00	-1 bar
124-21-122-00010J-SK	57.00	0-10 bar
124-21-122-00160J-SK	57.00	0-160 bar
124-21-122-00250J-SK	57.00	0-250 bar
124-21-122-00315J-SK	57.00	0-315 bar



2.5" Gauges Rear Entry - 1/4" BSPP

Part Number	List Price \$	Pressure Range
ILX6306VPBLO/-1	62.00	-1 bar
ILX6306PBLO/10	52.00	0-10 bar
ILX6306PBLO/16	52.00	0-16 bar
ILX6306PBLO/25	52.00	0-25 bar
ILX6306PBLO/40	52.00	0-40 bar
ILX6306PBLO/60	52.00	0-60 bar
ILX6306PBLO/100	52.00	0-100 bar
ILX6306PBLO/160	52.00	0-160 bar
ILX6306PBLO/250	52.00	0-250 bar
ILX6306PBLO/315	52.00	0-315 bar
ILX6306PBLO/400	52.00	0-400 bar
ILX6306PBLO/700	100.00	0-700 bar



GAUGES, TEST COUPLINGS & PRESSURE SWITCHES

Pressure Gauges

4.0" Gauges Rear Entry - 1/2" BSPP

Part Number	List Price \$	Pressure Range
ILX1008PBL0/10	134.00	0-10 bar
ILX1008PBL0/16	134.00	0-16 bar
ILX1008PBL0/25	134.00	0-25 bar
ILX1008PBL0/40	134.00	0-40 bar
ILX1008PBL0/60	134.00	0-60 bar
ILX1008PBL0/100	134.00	0-100 bar
ILX1008PBL0/160	134.00	0-160 bar
ILX1008PBL0/250	134.00	0-250 bar
ILX1008PBL0/315	134.00	0-315 bar
ILX1008PBL0/400	134.00	0-400 bar
ILX1008PBL0/700	196.00	0-700 bar



Accessories

Part Number	List Price \$	Description
BB5-4450.000	27.00	Flange for 4" gauges (flange fitted on request)
BB3-4450.004	10.00	Flange for 2.5" gauges (flange fitted on request)
BB1-4450.000	6.00	Flange for 1.5" gauges (flange fitted on request)
BA5-4450.002	12.00	Stirrup for 4" gauges
BA3-4450.000	8.00	Stirrup for 2.5" gauges
BA1-4450.001	6.00	Stirrup for 1.5" gauges
AZ3-0000.004	15.00	Rubber gauge cover 2.5"
AZ5-0000.000	36.00	Rubber gauge cover 4.0"



Part: CBOXMEDS1-M **List Price: \$515.00**

Kit includes:	Description
Pressure Gauges x2	Your choice
Test Hose	Test 20x2m
Direct Gauge Connector	1/4" Male Test 20
Direct Gauge Connector	1/4" Female Test 20
Test Point	1/4" BSPP
Test Point	1/4" 18 NPTF
Test Point	M8x1
Test Point	M14x1.5
Test Point	7/16" 20 UNF
Reducing Adaptor	M10x1F - M ISO228 G3/8"
Reducing Adaptor	M10x1F - M ISO228 G1/2"
Anti-shock Valve	90 Deg Entry
Anti-shock Valve	Swivel Direct Entry



Part: CBOXMEDDS **List Price: \$1030.00**

Kit includes:	Description
Digital Gauge	700 bar
Test Hose	Test 20x2m
Direct Gauge Connector	1/4" Male Test 20
Direct Gauge Connector	1/4" Female Test 20
Test Point	1/4" BSPP
Test Point	1/4" 18 NPTF
Test Point	M8x1
Test Point	M14x1.5
Test Point	7/16" 20 UNF
Reducing Adaptor	M10x1F - M ISO228 G3/8"
Reducing Adaptor	M10x1F - M ISO228 G1/2"
Anti-shock Valve	90 Deg Entry
Anti-shock Valve	Swivel Direct Entry



Part: CBOXMED3-M **List Price: \$618.00**

Kit includes:	Description
Pressure gauges x3	40 bar, 160 bar, 300 bar
Test hose	1 x 2m
Gauge adaptor x3	Test 20



Test Couplings (M16x2)

Part Number	List Price \$	Thread	Seal Type
S10718G00C	16.00	1/8" BSPP	Elastomer
S10714G00C	16.00	1/4" BSPP	
S10414G00C	16.00	1/4" BSPP	
S10738G00C	16.00	3/8" BSPP	
S10438G00C	16.00	3/8" BSPP	
S10712G00C	17.00	1/2" BSPP	Metal
S10818280C	16.00	1/8" BSPT	
S10814190C	16.00	1/4" BSPT	
S10838190C	16.00	3/8" BSPT	
S10410X10C	16.00	M10x1	
S10612X15C	16.00	M12x1.5	Elastomer
S10614X15C	16.00	M14x1.5	
S10616X15C	16.00	M16x1.5	
S10134X16C	16.00	3/4" UNO	
S10171X20C	16.00	7/16" UNO	
S10191X18C	16.00	9/16" UNO	n/a
S10918270C	16.00	1/8" NPTF	
S10914180C	16.00	1/4" NPTF	
S10938180C	16.00	3/8" NPTF	
S11507163C	28.00	7/16" JICFS	
S11509163C	28.00	9/16" JICFS	n/a
S11506163C	28.00	3/4" JICFS	
S115116FSC	22.00	11/16" ORFS	
S115131FSC	23.00	13/16" ORFS	
S115914G0C	31.00	1/4" BSPP	
S115916FSC	22.00	9/16" ORFS	n/a
S11707162C	29.00	7/16" JIC Bulkhead	
S11709161C	29.00	9/16" JIC Bulkhead	



Gauge Isolators

Part Number	List Price \$	Thread
ES180	42.00	1/4" BSPT straight
ES090	42.00	1/4" BSPT 90 degree



Gauge Adaptors

Part Number	List Price \$	Description
20140000	23.00	Test 20 Female to 1/4 BSPP Gauge Adaptor Female Swivel
20120000	30.00	Test 20 Female to 1/2 BSPP Gauge Adaptor Female Swivel
21140000	29.00	90° 1/4" BSPP Gauge Adaptor Female Swivel To Test 20 Male
21120000	32.00	90° 1/2" BSPP Gauge Adaptor Female Swivel To Test 20 Male
18140000	21.00	1/4" BSPP Gauge Adaptor To Test 20 Male Bulkhead
18120000	27.00	1/2" BSPP Gauge Adaptor To Test 20 Male Bulkhead
1814M000	21.00	1/4" BSPP Swivel Gauge Adaptor To 1/4" BSPP Male
1812M000	9.00	1/2" BSPP Swivel Gauge Adaptor To 1/2" BSPP Male
1814MBSPT	9.00	1/4" BSPP Swivel Gauge Adaptor To 1/4" BSPT Male
1812MBSPT	21.00	1/2" BSPP Swivel Gauge Adaptor To 1/2" BSPT Male
24GG0000	29.00	90° Test 20 Female Swivel to Test 20 Male
40GD0000	15.00	Test 20 Male To Test 20 Male

* Note - Test 20 is M16x2



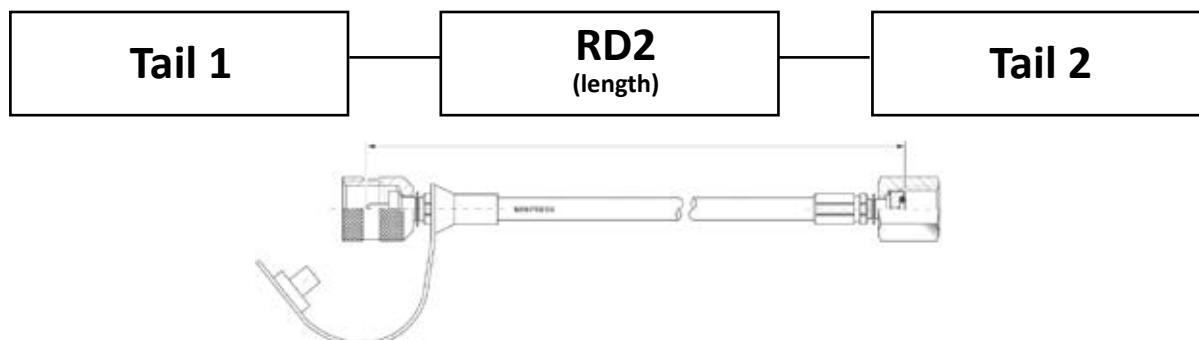
Hose Assembly

Part Number	List Price \$	Description
THA-500	29.00	Test Hose Assembly 500mm Test 20 Ends
THA-1000	32.00	Test Hose Assembly 1000mm Test 20 Ends
THA-1500	36.00	Test Hose Assembly 1500mm Test 20 Ends
THA-2000	40.00	Test Hose Assembly 2000mm Test 20 Ends
THA-2500	44.00	Test Hose Assembly 2500mm Test 20 Ends
THA-3000	49.00	Test Hose Assembly 3000mm Test 20 Ends
THA-4000	57.00	Test Hose Assembly 4000mm Test 20 Ends
THA-5000	66.00	Test Hose Assembly 5000mm Test 20 Ends
THA-6000	74.00	Test Hose Assembly 6000mm Test 20 Ends

* Note - Test 20 is M16x2

Test Hoses

Ordering a hose



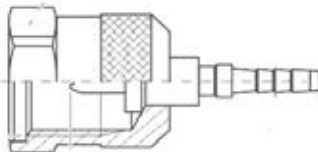
Hose

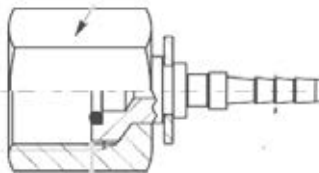
Part Number	List Price \$	Type	ID	OD	Max. Pressure	Burst Pressure	Temp
00RSD200	8.00	RD2	2mm	5mm	630 bar	1890 bar	-40/+100c

Ferrules

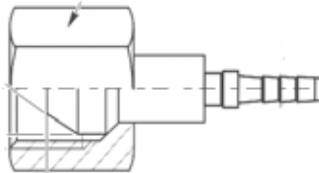
Part Number	List Price \$	Type	Material	Max. Pressure	
30BT2000	1.34	RD2	Steel	600 bar	
30BT2A10	9.00		Stainless		

Tails - RD2 Hose

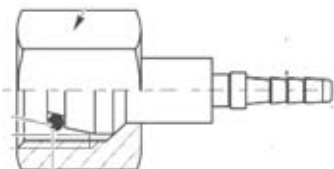
Part Number	List Price \$	Thread	Material	Type	 Test coupling
31TTN600	8.75	M16x2	Steel	Straight	
31TN6AI0	63.00		Stainless	Straight	
31TTN640	14.20		Steel	45 degree	
31TTN690	14.20			90 degree	

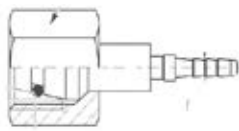
36140000	7.50	1/4" gauge	Steel	Straight	
3614AI00	66.50	1/4" gauge	Stainless		
36120000	13.20	1/2" gauge	Steel	45 degree	
36140040	12.00	1/4" gauge			
36120040	24.70	1/2" gauge			
36140090	12.00	1/4" gauge		90 degree	
36120090	24.70	1/2" gauge			

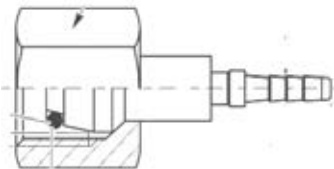
Gauges Threaded Fitting

38180000	8.00	G 1/8"	Steel	Straight	 <i>60° Cone Connection BSPP</i>
38140000	7.80	G 1/4"		45 degree	
38380000	10.80	G 3/8"			
38180040	12.00	G 1/8"		90 degree	
38140040	12.00	G 1/4"			
38180090	12.00	G 1/8"			
38140090	12.00	G 1/4"			

Tails - RD2 Hose

Part Number	List Price \$	Thread	Material	Type	 <i>24° Cone Connection Type DKOL</i>
35R00000	6.50	M12x1.5	Steel	Straight	
35R20000	6.80	M14x1.5			
35R50000	8.40	M16x1.5			
35R60000	10.80	M18x1.5			
35R00040	10.30	M12x1.5		45 degree	
35R20040	11.30	M14x1.5			
35R50040	13.00	M16x1.5			
35R00090	10.30	M12x1.5		90 degree	
35R20090	11.30	M14x1.5			
35R50090	13.00	M16x1.5			

46R00000	9.80	M8x1	Steel	Straight	 24° Cone Connection Type DKOLL
46R10000	7.80	M10x1		Straight	
46R10040	12.90	M10x1		45 degree	
46R10090	12.90	M10x1		90 degree	

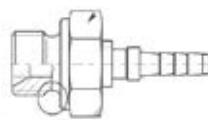
35R10000	6.50	M14x1.5	Steel	Straight		
35R30000	7.10	M16x1.5				
35R40000	8.20	M18x1.5				
35R70000	10.80	M20x1.5		45 degree		
35R10040	10.30	M14x1.5				
35R30040	12.30	M16x1.5				
35R40040	12.70	M18x1.5				
35R10090	10.30	M14x1.5		90 degree		
35R30090	12.30	M16x1.5				
35R40090	12.70	M18x1.5				

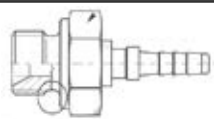
24° Cone Connection Type DKOS

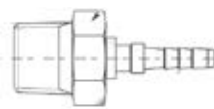
39160000	6.90	7/16-20 UNF	Steel	Straight	
3916AI00	51.30	7/16-20 UNF	Stainless		
3991J000	8.10	9/16-18 UNF	Steel		
39160040	12.00	7/16-20 UNF		45 degree	
39160090	12.00	7/16-20 UNF		90 degree	

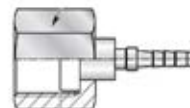
JIC 74° Connection Type DKJ

Tails - RD2 Hose

Part Number	List Price \$	Thread	Material	Type	 <i>BSPP 60° Cone Connection</i>
44MFM180	9.80	G 1/8"	Steel	Straight	
44MFM140	9.80	G 1/4"			

44MFD180	7.20	G 1/8"	Steel	Straight	 <i>BSPP with WD Seal</i>
44MFD140	12.90	G 1/4"			

44MFC180	7.20	R 1/8"	Steel	Straight	 <i>BSPT</i>
44MFC140	9.80	R 1/4"			

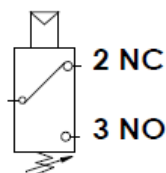
5991F000	8.20	9/18-18" UNF	Steel	Straight	 <i>ORFS Female Thread</i>
5991F040	12.40			45 degree	
5991F090	12.40			90 degree	

Pressure Switches

Part Number	List Price \$	Pressure Range	Thread	Voltage	Contact
4010116	93.00	50-150 bar	1/8" BSPT	≤ 48v	NO
4010117	93.00	100-300 bar			NO
4020116	93.00	50-150 bar			NC
4020117	93.00	100-300 bar			NC
4110110	57.00	0.1-1 bar			NO
4110112	57.00	1-10 bar			NO
4110113	57.00	10-20 bar			NO
4110114	57.00	20-50 bar			NO
4120110	57.00	0.1-1 bar			NC
4120112	57.00	1-10 bar			NC
4120113	57.00	10-20 bar			NC
4120114	57.00	20-50 bar			NC

Pressure Switches - with adjusting knob

Part Number	List Price \$	Pressure Range	Thread	Voltage	Contact
69223015	335.00	8-150 bar	1/4" BSPPF	≤ 250v	NO/NC
69223016	335.00	40-400 bar			NO/NC



Pressure Switch Accessories

Part Number	List Price \$	Description
3015001	6.00	Rubber Protective Cap for Pressure Switch IP65
3900001	10.00	Plastic Protective cap for Pressure Switches IP65
3900200	15.00	Din Plug for Pressure Switches IP65



Axial Piston Pumps

198

Pump & Controller Options

199

PISTON PUMPS

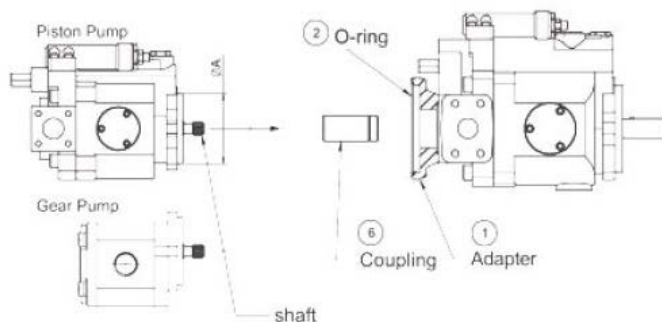
V Axial Piston Pumps

Specifications

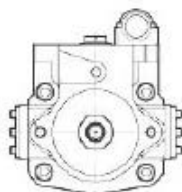
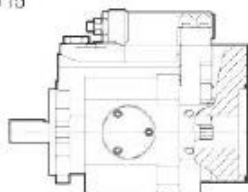
Model	List Price \$	Displacement at 100PSI (7 bar)			Pressure Adj. Range Bar	Speed RPM		Weight KG
		cm ³ /rev	1500 RPM lpm	1800 RPM lpm		Max	Min	
V15	2045.00	15.0	22.5	27.0	1: 8~70 2: 15~140 3: 20~210 4: 20~250	1800	500	13
V23	2529.00	23.0	35.4	41.4				22
V38	3203.00	37.8	56.7	68.0				26
V50	5099.00	51.5	77.2	92.7				56
V70	5923.00	69.7	104.5	125.4	1: 8~70 2: 15~140 3: 20~210			

Pump 2

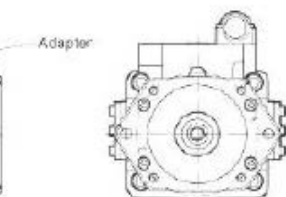
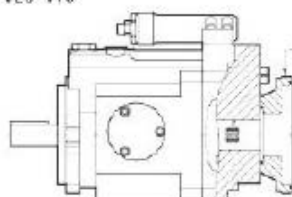
Pump 1



V15



V23-V70



NOMENCLATURE:

V	15	A	3	R			-		40	
1	2	3	4	5	6	7		8	9	10

1 Series

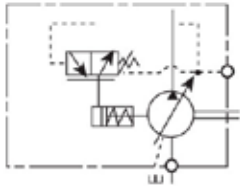
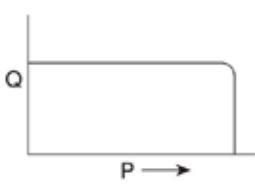
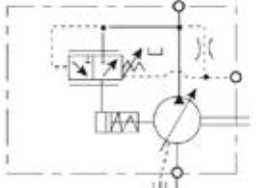
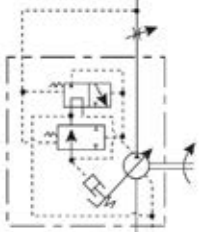
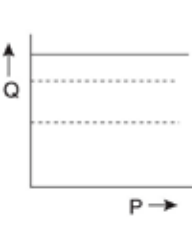
Axial piston pump Variable displacement High pressure version	Nominal pressure: 175 bar Maximum pressure: 280 bar Single operation period: 250 bar (6ms), 315 bar (2.5ms)	V

2 Size & Displacement

	15	23	38	50	70
Size	1	2	3	4	4
Displacement cm ³ /rev	15	23	37.8	51.5	69.7

3 Control Device

	List Price \$ (V15/23/38)	List Price \$ (V50/70)	Controls
Standard pressure control	-	-	A
Remote pressure control	335.00	567.00	G
Load-sensing control high pressure (21kg)	366.00	458.00	HLC

Controls	Symbol	Characteristic	Specifications
A			- When system pressure increases and reaches required pressure, the flow decreases automatically and the pressure is constant. - Pressure and flow can be manually adjusted.
G			- The same function of control type A. - Pressure can be adjusted remotely by the remote control valve.
HLC			- HL valve with two different pressures, control displacement. - The flow can be changed by HL valve, the sensing feedback can reach low oil temperature and energy saving.

PISTON PUMPS

Pump & Controller Options

4 Pressure Adjusting

8 - 70 bar	1
15 - 140 bar	2
20 - 210 bar	3
20 - 250 bar	4

5 Rotation

Clockwise ↻	R
Counter Clockwise ↺	L

6 Direction of Pipe Connections

Standard: Side Port (flange)	(blank)

7 Shaft Type

	Keyed (standard)		Spline (optional)	
V15	Keyed 3/4	(blank)	13T 16/32 DP	S
V23, V38	Keyed 7/8	(blank)	13T 16/32 DP	S
V50, V70	Keyed 1.1/4	(blank)	14T 12/24 DP	S

8 Voltage - option unavailable

9 Thread Type

BSPP (G)	40

10 Thru Drive & Second Pump

	Part	List Price \$	
Ø 82.55mm SAE A	V15, V23, V38	2215.00	D
	V50, V70	2575.00	D

Cross Reference Chart	202
BMM Series Gerotor Motors	203
BMP Series Gerotor Motors	204
BMPH Series Gerotor Motors	206
BMR Series Geroler Motors	208
BMRS Series Geroler Motors	210
BMSY Series Geroler Motors	212
BMT Series Geroler Motors	214
BMV Series Geroler Motors	216
Hydraulic Brakes	218
Hydraulic Motor Valves	219
Planetary Gearbox	221

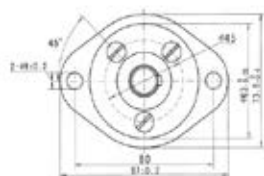
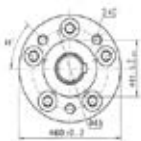
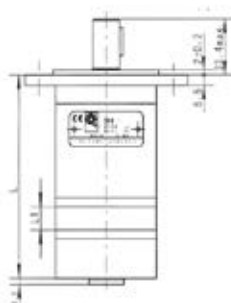
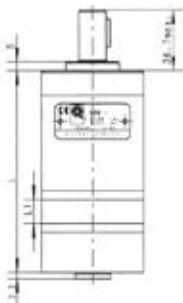
HYDRAULIC MOTORS

Cross Reference Chart

	Danfoss	Eaton	M+S	Parker	White
BMP, BMPH	OMP, DH	H	MP	TC	WP, WD
BMR, BMRS	OMR, DS	S	MR	TC	WR, RS
BMH	OMH		MH		
BMSY	OMS	2000	MSY	TF, TG	WS, RE, DR
BMT	OMT	4000, 6000	MT		
BMK6		6000			
BMV	OMV	6000, 10000	MV		
BMM	OMM		MM		
BME2		J2		TE, TC, TB	WG
BMER			HW	TF, TG	RE, RC
BMEC					CE
BMJ	OMEW	W	RW	TJ	
BMPW	OMEW		PW		

BMM Series

Size:		BMM8	BMM12.5	BMM20	BMM32	BMM40	BMM50
List Price \$		361.00	361.00	361.00	386.00	453.00	453.00
CC		8.2	12.9	19.9	31.6	39.8	50.3
Features		1/8" BSPP standard case drain					
Flange options (B)		(F) SAE AA 2 bolt (M) face mount					
Shaft options (C)		(A) 16mm keyed (B) 5/8" keyed (C) 16.5mm 9T spline					
Ports (D)		(1E) 3/8" BSPP Rear (E) 3/8" BSPP Side					
Part Number build = Size + (B) + (C) + (D) e.g. BMM8-F-A-E							
Max Inlet Pressure Cont	Bar	175	175	175	175	175	175
Max Inlet Pressure Int		225	225	225	225	225	225
Max Speed Cont	Rpm	1950	1550	1000	630	500	400
Max Speed Int		2450	1940	1250	800	630	500
Pressure Cont	Bar	100	100	100	100	90	70
Pressure Int		140	140	140	140	140	140
Pressure Peak		200	200	200	160	160	160
Max Torque Cont	Nm	11	16	25	40	45	46
Max Torque Int		15	23	35	57	70	88
Max Torque Peak		21	33	51	64	82	100
Max Output Cont	kW	1.8	2.4	2.4	2.4	2.2	1.8
Max Output Int		2.6	3.2	3.2	3.2	3.2	3.2
Max Flow Cont	lpm	16	20	20	20	20	20
Max Flow Int		20	25	25	25	25	25
Weight	kg	1.9	2	2.1	2.2	2.3	2.4
M Flange L	mm	104	106	109	114	117.5	122
M Flange L1		3.5	5.5	8.5	13.5	17	21.5
F Flange L		107.5	109.5	112.5	117.5	121	125.5
F Flange L1		3.5	5.5	8.5	13.5	17	21.5



Seal Kit

Part Number	List Price \$
BMM-SK	52.00



HYDRAULIC MOTORS

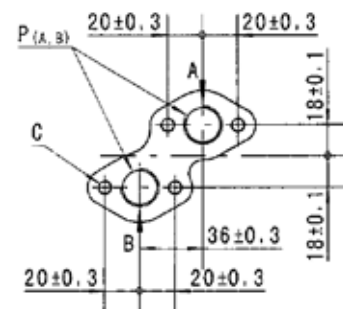
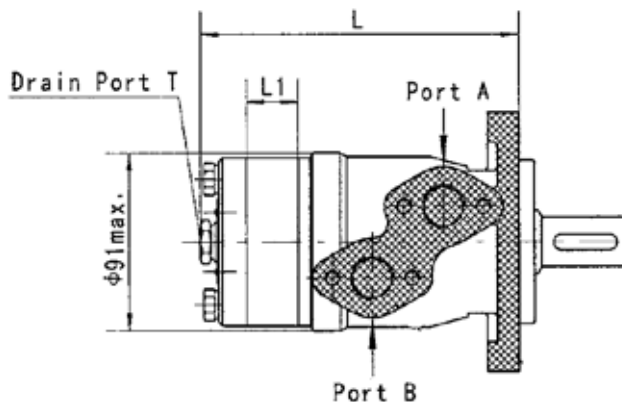
Gerotor Motors - BMP

BMP Series

Size:	BMP36	BMP50	BMP80	BMP100	BMP125	BMP160	BMP200	BMP250	BMP315	BMP400	
List Price \$	443.00	443.00	453.00	453.00	464.00	474.00	494.00	515.00	546.00	556.00	
CC	36	51.7	77.7	96.2	120.2	157.2	194.5	240.3	314.5	389.5	
Features	Needle bearings + 200 Bar shaft seals										
Ports	1/2" BSPP (A+B), 1/4" BSPP Drain										
Flange options (B)	(2) SAE A 2 bolt (4) 4 bolt magneto (H4) 4 bolt square										
Shaft options (C)	(C) 1" keyed (A) 25mm keyed (E) 1" 6T spline (F) 14T spline (T) 28.56mm taper										
Part Number build = Size + (B) + (C) e.g. BMP36-2-E											
Max Speed Cont	Rpm	1500	1150	770	615	490	383	310	250	192	155
Max Speed Int		1650	1450	960	770	615	475	385	310	240	190
Pressure Cont	Bar	125	140	140	140	140	140	140	110	90	70
Pressure Int		165	175	175	175	175	175	175	140	140	105
Pressure Peak		225	225	225	225	225	225	225	180	160	140
Max Torque Cont	Nm	55	100	146	182	236	302	360	380	375	360
Max Torque Int		76	128	186	227	290	370	440	460	555	525
Max Torque Peak		96	148	218	264	360	434	540	550	650	680
Max Output Cont	kW	8	10	10	11	10	10	10	8.5	7	6
Max Output Int		11.5	12	12	13	12	12	12	10.5	8.5	7
Max Flow Cont	lpm	55	60	60	60	60	60	60	60	60	60
Max Flow Int		60	75	75	75	75	75	75	75	75	75
Weight	kg	5.6	5.6	5.7	5.9	6	6.2	6.4	7	6.9	7.4
Dimension L	mm	137	137	140.5	143	146	151	157	162	172	182
Dimension L1		7	7	10.5	13	16	21	26	32	42	52
A/B		G1/2"									
C		M8									
T		G1/4"									

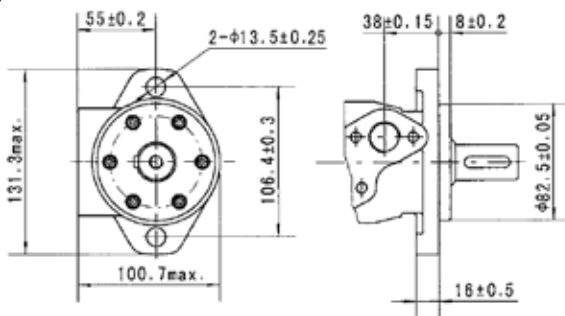
Seal Kit

Part Number	List Price \$
BMP-SK	52.00

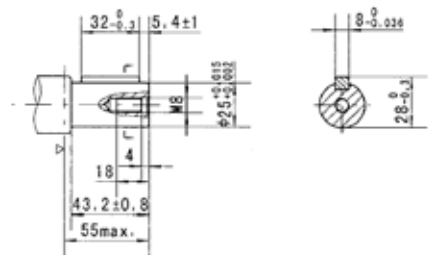




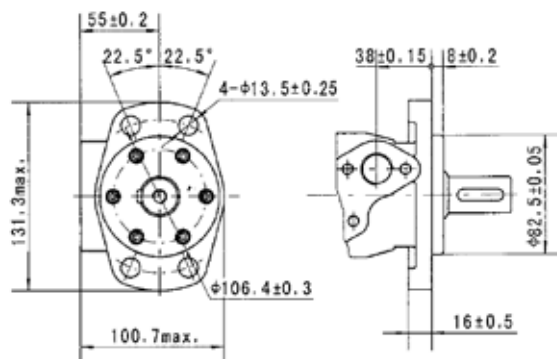
(2)



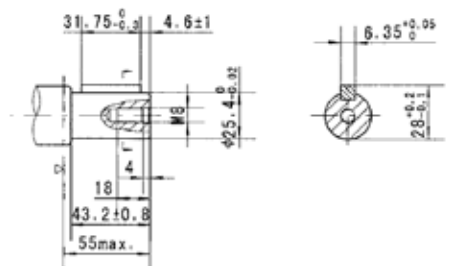
(A)



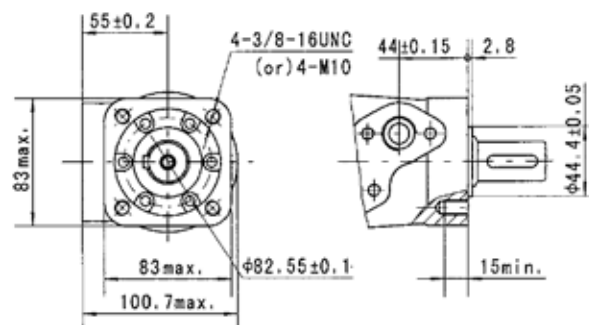
(4)



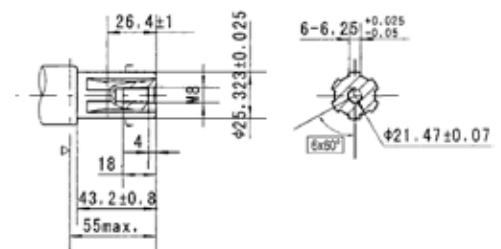
(C)



(H4)



(E)



HYDRAULIC MOTORS

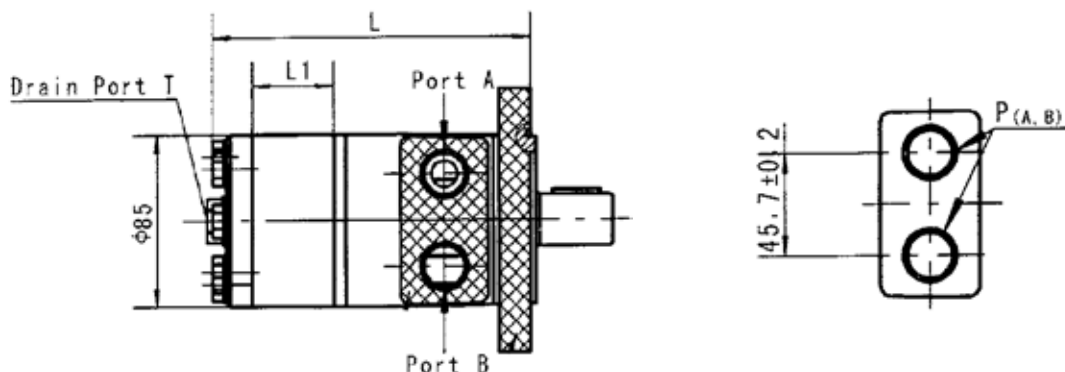
Gerotor Motors - BMPH

BMPH Series

Size:		BMPH 36	BMPH 50	BMPH 80	BMPH 100	BMPH 125	BMPH 160	BMPH 200	BMPH 250	BMPH 315	BMPH 400
List Price \$		443.00	443.00	453.00	453.00	464.00	474.00	494.00	515.00	546.00	556.00
CC		36	51.7	77.7	96.2	120.2	157.2	194.5	240.3	314.5	389.5
Features		Needle bearings + 200 Bar shaft seals									
Ports		7/8" UNO (A+B), 7/16" UNO Drain									
Flange options (B)		(H2) SAE A 2 bolt (H6) 4 bolt magneto (H4) 4 bolt square									
Shaft options (C)		(R) 1" keyed (A) 25mm keyed (S) 1" 6T spline (I) 13T spline (T2) 25.4mm taper									
Part Number build = Size + (B) + (C) e.g. BMPH36-H2-R											
Max Speed Cont	Rpm	1500	1150	770	615	490	383	310	250	192	155
Max Speed Int		1650	1450	960	770	615	475	385	310	240	190
Pressure Cont	Bar	125	140	140	140	140	140	140	110	90	70
Pressure Int		165	175	175	175	175	175	175	140	140	105
Pressure Peak		225	225	225	225	225	225	225	180	160	140
Max Torque Cont	Nm	55	100	146	182	236	302	360	380	375	360
Max Torque Int		76	128	186	227	290	370	440	460	555	525
Max Torque Peak		96	148	218	264	360	434	540	550	650	680
Max Output Cont	kW	8	10	10	11	10	10	10	8.5	7	6
Max Output Int		11.5	12	12	13	12	12	12	10.5	8.5	7
Max Flow Cont	lpm	55	60	60	60	60	60	60	60	60	60
Max Flow Int		60	75	75	75	75	75	75	75	75	75
Weight	kg	5.6	5.6	5.7	5.9	6	6.2	6.4	7	6.9	7.4
Dimension L	mm	141	141	144.5	147	150	155	160	166	176	186
Dimension L1		7	7	10.5	13	16	21	26	32	42	52
A/B		7/8" UNO									
T		7/16" UNO									

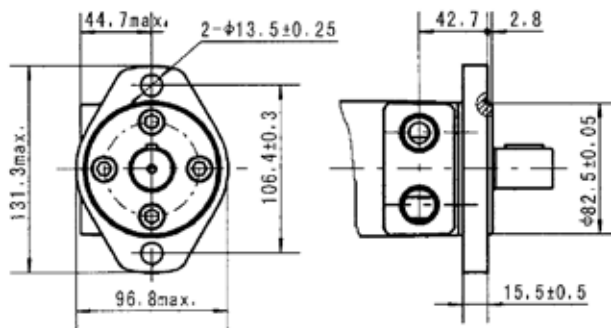
Seal Kit

Part Number	List Price \$
BMPH-SK	103.00

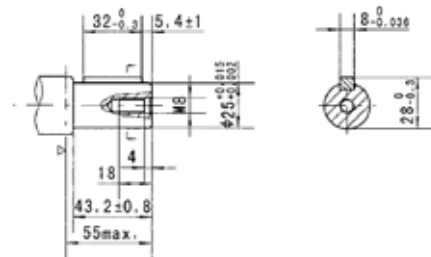




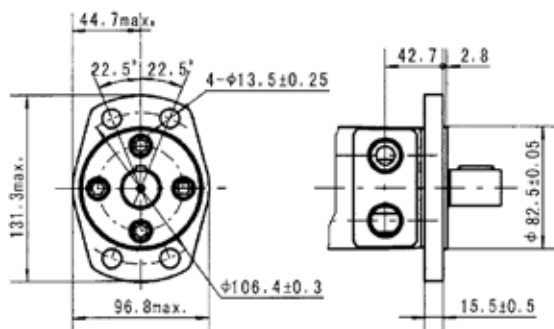
(H2)



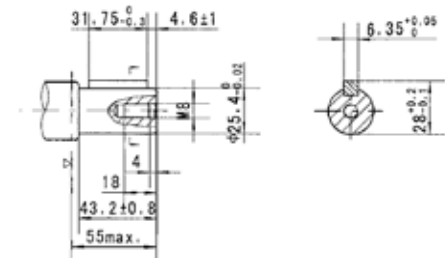
(A)



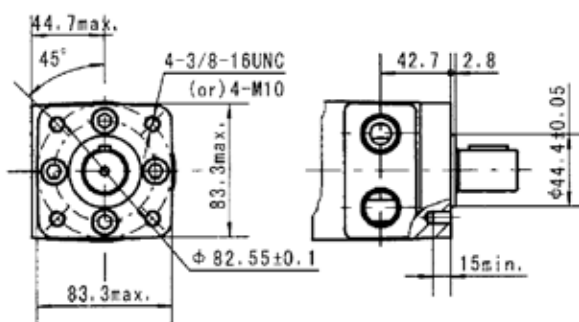
(H6)



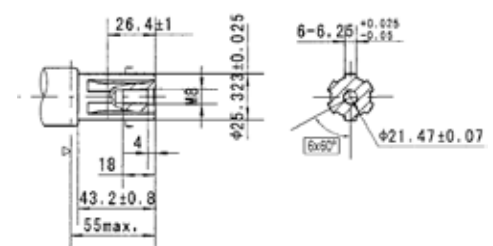
(R)



(H4)



(S)



HYDRAULIC MOTORS

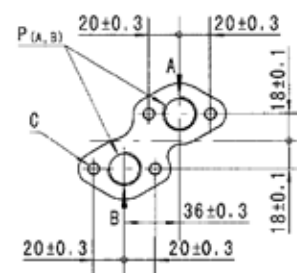
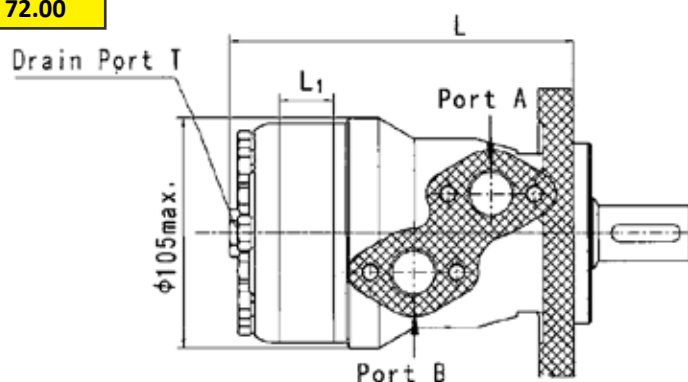
Geroler Motors - BMR

BMR Series

Size:		BMR36	BMR50	BMR80	BMR100	BMR125	BMR160	BMR200	BMR250	BMR315	BMR400
List Price \$		525.00	525.00	536.00	536.00	546.00	556.00	567.00	577.00	608.00	618.00
CC		36	51.7	81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Features		Needle bearings + 200 Bar shaft seals									
Ports		1/2" BSPP (A+B), 1/4" BSPP Drain									
Flange options (B)		(2) SAE A 2 bolt (4) 4 bolt magneto (H4) 4 bolt square									
Shaft options (C)		(C) 1" keyed (A) 25mm keyed (E) 1" 6T spline (F) 14T spline (B) 32mm keyed (I) 13T spline (T) 28.56mm taper (G) 1.1/4" keyed									
Part Number build = Size + (B) + (C) e.g. BMR36-2-E											
Max Speed Cont	Rpm	1085	960	750	600	475	378	310	240	190	155
Max Speed Int		1220	1150	940	750	600	475	385	300	240	190
Pressure Cont	Bar	140	140	175	175	175	165	130	110	90	70
Pressure Int		165	175	200	200	200	200	175	150	130	100
Pressure Peak		225	225	225	225	225	225	225	225	200	175
Max Torque Cont	Nm	72	100	195	240	300	360	360	390	390	365
Max Torque Int		83	126	220	280	340	430	440	490	535	495
Max Torque Peak		105	165	270	320	370	460	560	640	650	680
Max Output Cont	kW	8.5	9.5	12.5	13	12.5	12.5	10	7	6	5
Max Output Int		9.8	11.2	15	15	14.5	14	13	9.5	9	8
Max Flow Cont	lpm	40	50	60	60	60	60	60	60	60	60
Max Flow Int		45	60	75	75	75	75	75	75	75	75
Weight	kg	6.5	6.7	6.9	7	7.3	7.6	8	8.5	9	9.5
Dimension L	mm	137	140	146	150	155	161.5	170	180	192	204
Dimension L1		7	10	16	20	25	30.5	38.1	50	62	74
A/B		G1/2"									
C		M8									
T		G1/4"									

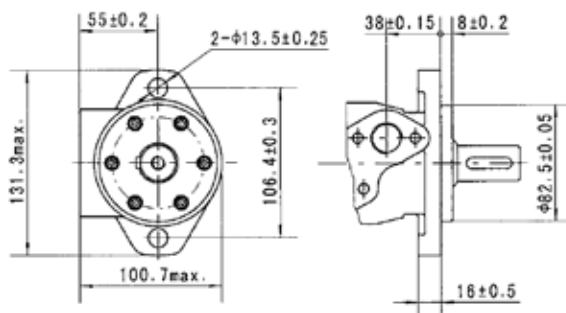
Seal Kit

Part Number	List Price \$
BMR-SK	72.00

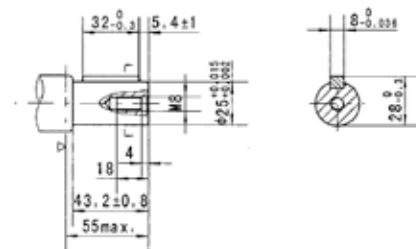




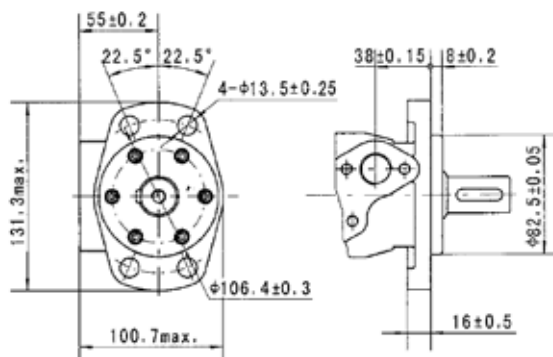
(2)



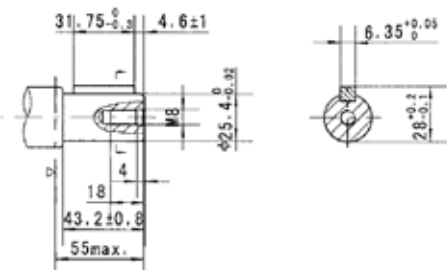
(A)



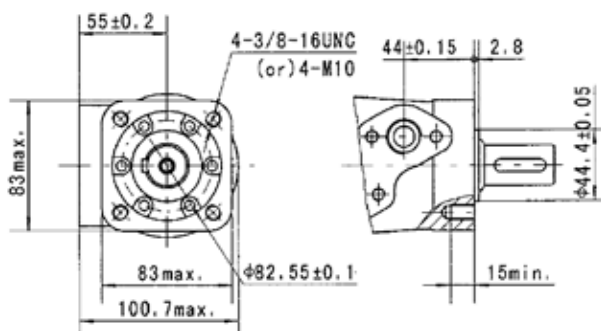
(4)



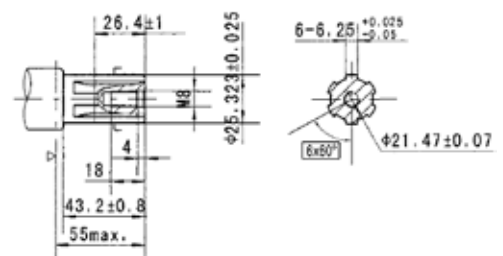
(C)



(H4)



(E)



HYDRAULIC MOTORS

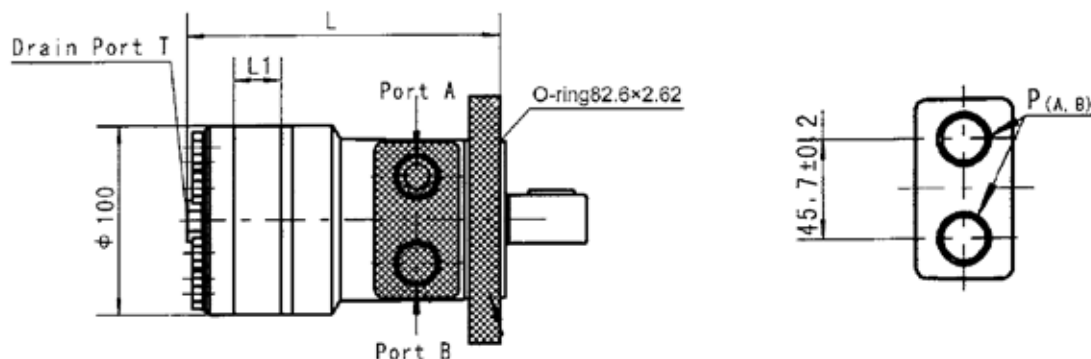
Geroler Motors - BMRS

BMRS Series

Size:		BMRS 36	BMRS 50	BMRS 80	BMRS 100	BMRS 125	BMRS 160	BMRS 200	BMRS 250	BMRS 315	BMRS 400
List Price \$		525.00	525.00	536.00	536.00	546.00	556.00	567.00	577.00	608.00	618.00
CC		36	51.7	81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Features		Needle bearings + 200 Bar shaft seals									
Ports		7/8" UNO (A+B), 7/16" UNO Drain									
Flange options (B)		(H2) SAE A 2 bolt (H6) 4 bolt magneto (H4) 4 bolt square									
Shaft options (C)		(R) 1" keyed (A) 25mm keyed (S) 1" 6T spline (F) 14T spline (I) 13T spline (T2) 25.4mm taper									
Part Number build = Size + (B) + (C) e.g. BMRS36-H2-F											
Max Speed Cont	Rpm	1085	960	750	600	475	378	310	240	190	155
Max Speed Int		1220	1150	940	750	600	475	385	300	240	190
Pressure Cont	Bar	140	140	175	175	175	165	130	110	90	70
Pressure Int		165	175	200	200	200	200	175	150	130	100
Pressure Peak		225	225	225	225	225	225	225	225	200	175
Max Torque Cont	Nm	72	100	195	240	300	360	360	390	390	365
Max Torque Int		83	126	220	280	340	430	440	490	535	495
Max Torque Peak		105	165	270	320	370	460	560	640	650	680
Max Output Cont	kW	8.5	9.5	12.5	13	12.5	12.5	10	7	6	5
Max Output Int		9.8	11.2	15	15	14.5	14	13	9.5	9	8
Max Flow Cont	lpm	40	50	60	60	60	60	60	60	60	60
Max Flow Int		45	60	75	75	75	75	75	75	75	75
Weight	kg	6.5	6.7	6.9	7	7.3	7.6	8	8.5	9	9.5
Dimension L	mm	137	140	146	150	155	161.5	170	180	192	204
Dimension L1		7	10	16	20	25	30.5	38.1	50	62	74
A/B		7/8" UNO									
T		7/16" UNO									

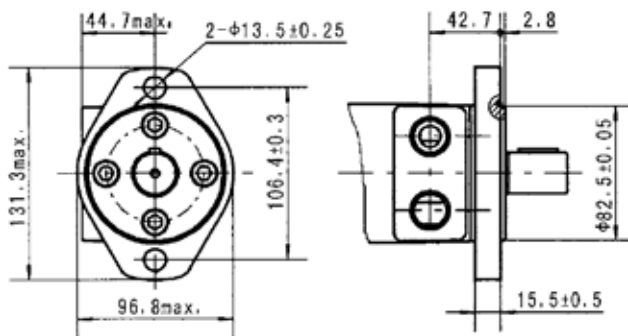
Seal Kit

Part Number	List Price \$
BMRS-SK	72.00

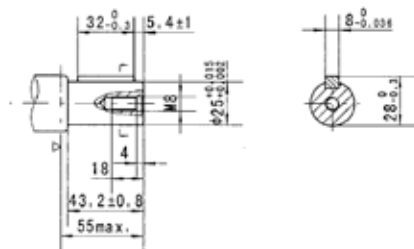




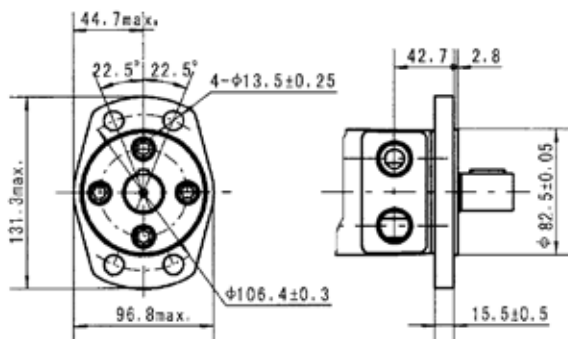
(H2)



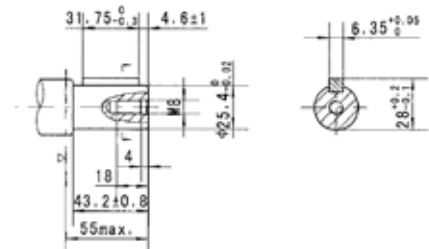
(A)



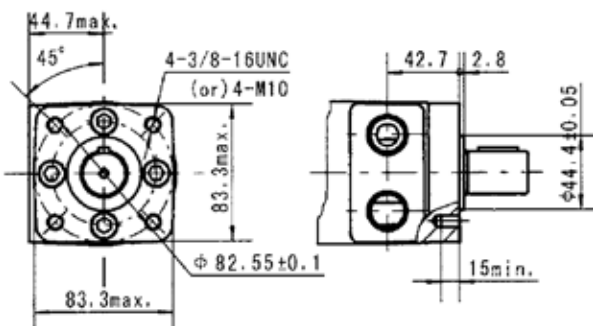
(H6)



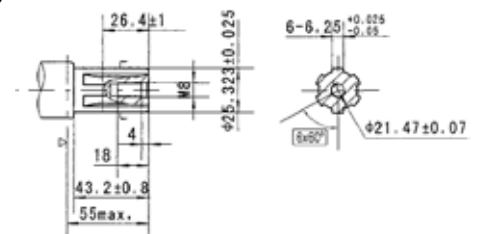
(R)



(H4)



(S)



HYDRAULIC MOTORS

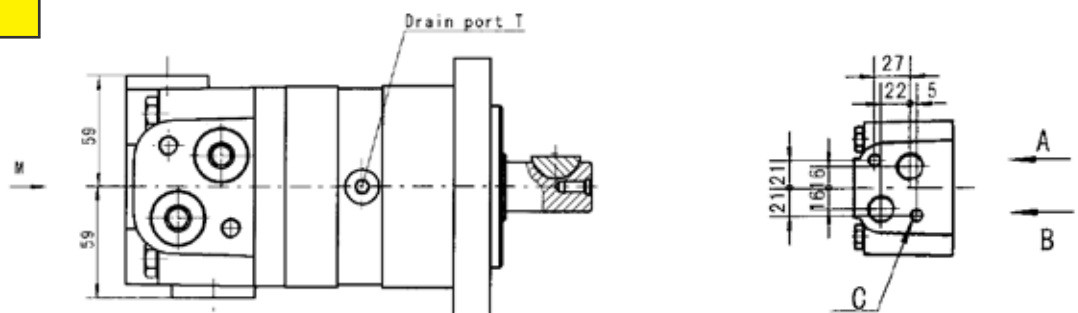
Geroler Motors - BMSY

BMSY Series

Size:		BMSY 80	BMSY 100	BMSY 125	BMSY 160	BMSY 200	BMSY 250	BMSY 315	BMSY 400	BMSY 475
List Price \$		886.00	906.00	937.00	958.00	989.00	1009.00	1030.00	1071.00	1236.00
CC		80.6	100.8	125	154	194	243	311	394	475
Features		Tapered roller bearings + 200 Bar shaft seals								
Ports		1/2" BSPP (A+B), 1/4" BSPP Drain								
Flange options (B)		(E2) SAE A 2 bolt (E4) 4 bolt square (F6) 6 bolt magento								
Shaft options (C)		(G) 1.1/4" keyed (B) 32mm keyed (F) 14T spline (T1) 35mm taper								
Part Number build = Size + (B) + (C) e.g. BMSY80-E2-G										
Max Inlet Press Cont	Bar	250	250	250	250	250	250	250	250	250
Max Inlet PresS Int		300	300	300	300	300	300	300	300	300
Max Speed Cont	Rpm	800	748	600	470	375	300	240	185	155
Max Speed Int		988	900	720	560	450	360	280	225	185
Pressure Cont	Bar	205	205	205	210	210	200	200	160	140
Pressure Int		225	225	225	225	225	225	225	175	150
Pressure Peak		295	295	295	225	225	225	225	200	175
Max Torque Cont	Nm	225	290	365	485	586	708	880	880	910
Max Torque Int		250	320	400	540	645	806	960	960	960
Max Output Cont	kW	16	18	18	18.1	18.1	18	17	11	9
Max Output Int		20	22	23	25	24	23.8	20.2	12	11
Max Flow Cont	lpm	65	75	75	75	75	75	75	75	75
Max Flow Int		80	90	90	90	90	90	90	90	90
Weight	kg	9.8	10	10.3	10.7	11.1	11.6	12.3	13.2	14.3
Dimension L	mm	170	174	179	181	188	196	208	223	237
Dimension L1		16	20	25	27	34	42	54	69	83
A/B		G1/2"								
C		M10								
T		G1/4"								

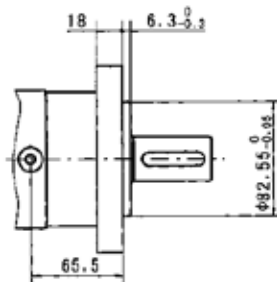
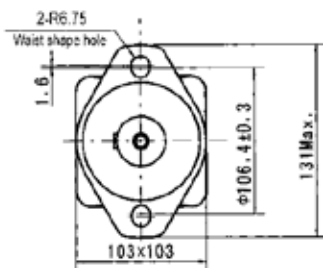
Seal Kit

Part Number	List Price \$
BMSY-SK	72.00

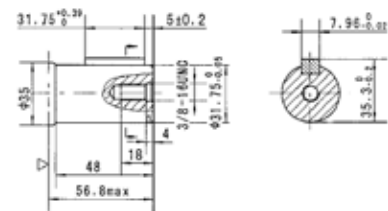




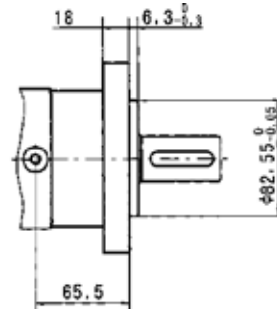
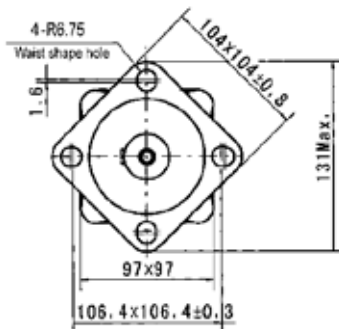
(E2)



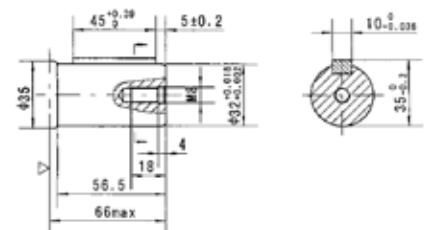
(G)



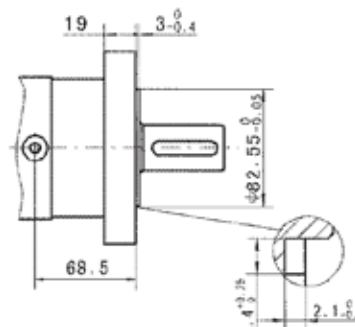
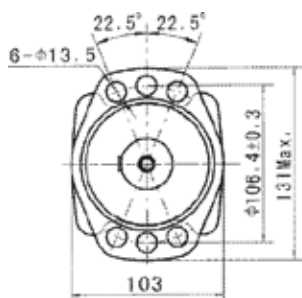
(E4)



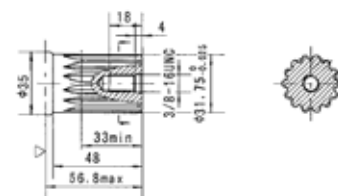
(B)



(F6)



(F)



HYDRAULIC MOTORS

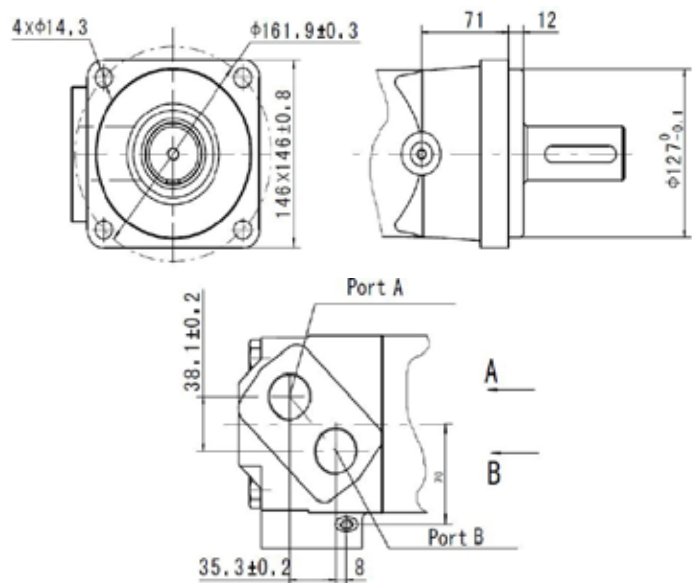
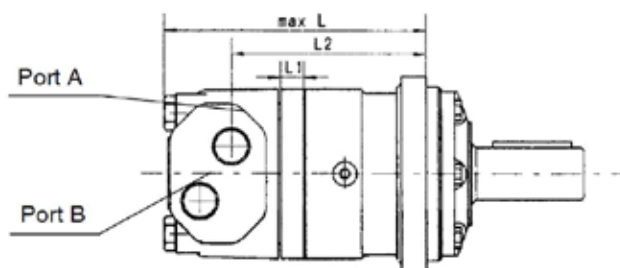
Geroler Motors - BMT

BMT Series

Size:	BMT160	BMT200	BMT250	BMT315	BMT400	BMT500	BMT630	BMT800	
List Price \$	1566.00	1576.00	1607.00	1617.00	1658.00	1813.00	1854.00	1906.00	
CC	161.1	201.4	251.8	326.3	410.9	523.6	629.1	801.8	
Ports	3/4" BSPP (A+B), 1/4" BSPP drain								
Flange options (B)	(4) 4 bolt square								
Shaft options (C)	(M) 40mm (G) 1.1/2" (B) 32 (G1) 1.1/4"								
Part Number build = Size + (B) + (C) e.g. BMT160-4-M									
Max Speed Cont	Rpm	625	625	500	380	305	240	196	154
Max Speed Int		780	750	600	460	365	285	233	185
Pressure Cont	Bar	200	200	200	200	180	160	140	125
Pressure Int		240	240	240	240	210	180	160	130
Pressure Peak		280	280	280	280	240	210	190	160
Max Torque Cont	Nm	470	590	730	950	1080	1220	1318	1464
Max Torque Int		560	710	880	1140	1260	1370	1498	1520
Max Output Cont	kW	27.7	34.9	34.5	34.9	31.2	28.8	25.3	22.2
Max Output Int		32	40	40	40	35	35	27.5	26.8
Max Flow Cont	lpm	100	125	125	125	125	125	125	125
Max Flow Int		125	150	150	150	150	150	150	150
Max Inlet Press Cont	Bar	210	210	210	210	210	210	210	210
Max Inlet Press Int		250	250	250	250	250	250	250	250
Weight	kg	19.5	20	20.5	21	22	23	24	25
Dimension L	mm	193	197	204	210	217	225	237	248
Dimension L1		17	21	14	20	27	35	47	58
Dimension L2		142.5	146.5	152.5	158.5	165.5	173.5	185.5	196.5

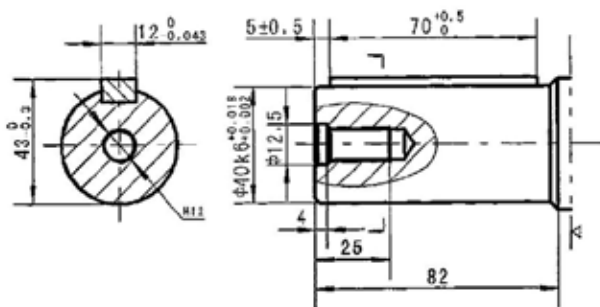
Seal Kit

Part Number	List Price \$
BMT-SK	113.00

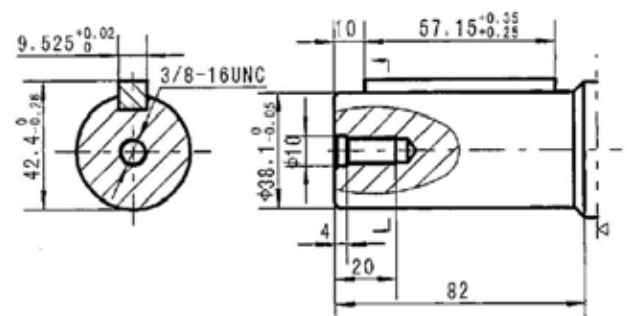




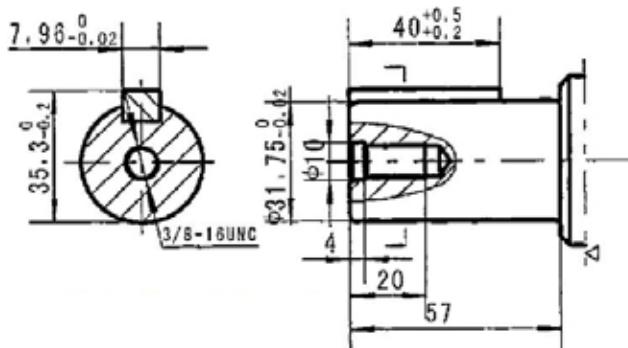
(M)



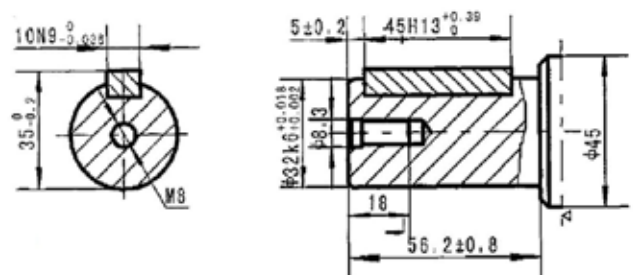
(G)



(G1)



(B)



HYDRAULIC MOTORS

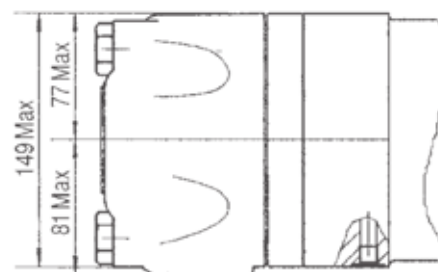
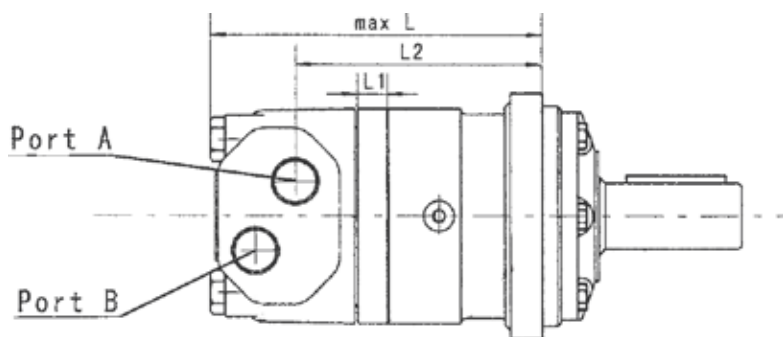
Geroler Motors - BMV

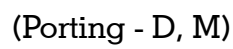
BMV Series

Size:		BMV315	BMV400	BMV500	BMV630	BMV800
List Price \$		2112.00	2163.00	2266.00	2730.00	2833.00
CC		333	419	518	666	801
Ports		1" BSPP (A+B), 1/4" BSPP drain				
Flange options (B)		(4) 4 bolt square (W) 4 bolt wheel mount				
Shaft options (C)		(C) 2.1/4" keyed (A) 50mm keyed (B) 16T spline				
Part Number build = Size + (B) + (C) e.g. BMV315-4-C						
Max Speed Cont	Rpm	510	500	400	320	250
Max Speed Int		630	600	480	380	300
Pressure Cont	Bar	200	200	200	180	160
Pressure Int		240	240	240	210	180
Pressure Peak		280	280	280	240	210
Max Torque Cont	Nm	920	1180	1460	1660	1880
Max Torque Int		1110	1410	1760	1940	2110
Max Torque Peak		1290	1640	2050	2210	2470
Max Output Cont	kW	38	47	47	40	33
Max Output Int		46	56	56	56	44
Max Flow Cont	lpm	160	200	200	200	200
Max Flow Int		200	240	240	240	240
Weight	kg	31.8	32.6	33.5	34.9	36.5
Dimension L	mm	217	224	232	244	255
Dimension L1		20	27	35	47	58
A/B		G1"				
C		M12				
T		G1/4"				

Seal Kit

Part Number	List Price \$
BMV-SK	155.00





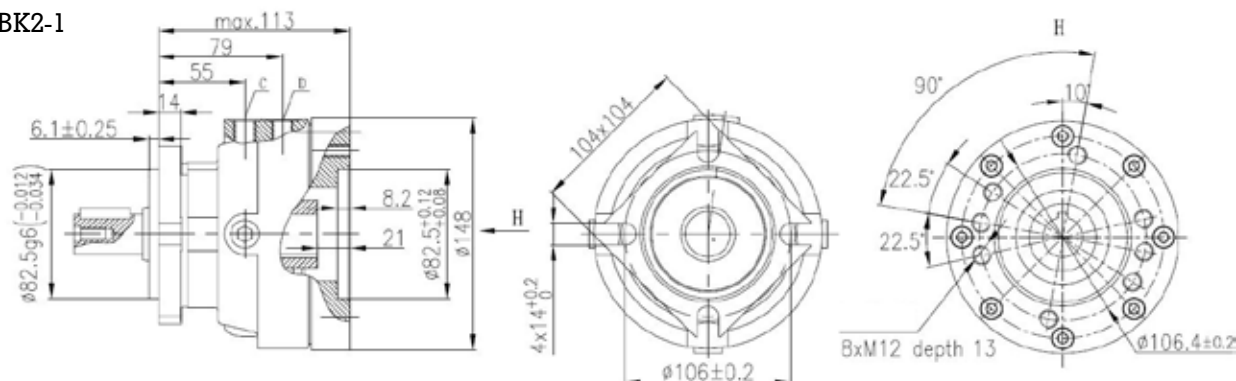
HYDRAULIC MOTORS

Hydraulic Brake

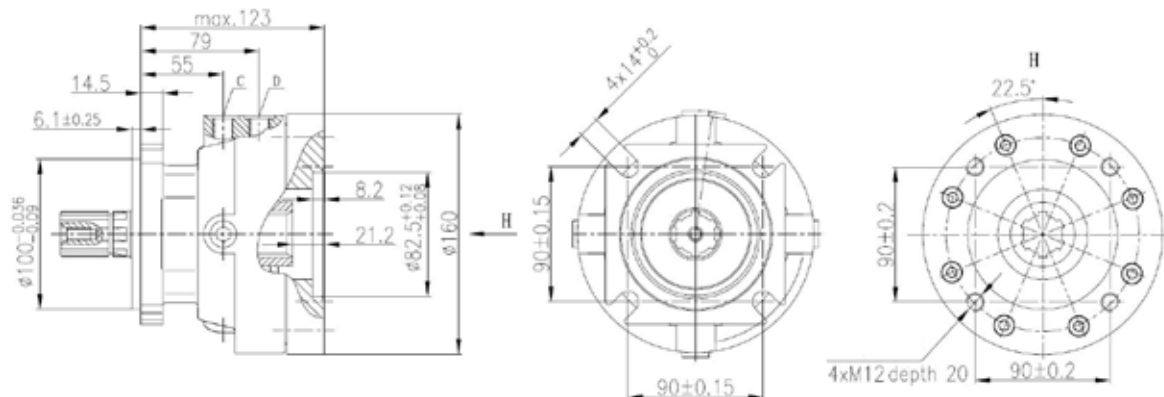
BK2 Series Brake

Part Number	List Price \$	Min Operating Pressure	Maximum Pressure	Input Shaft	Output Shaft	Min Static Torque
BK2-1-430-CCB	800.00	17-23 bar	300 bar	1" SAE-A	1" SAE-A	410-450 Nm
BK2-2-430-GCB	800.00			1" SAE-A	1.1/4" SAE-B	

BK2-1

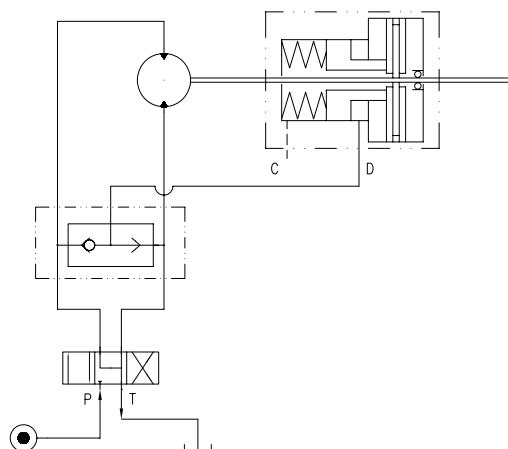


BK2-2



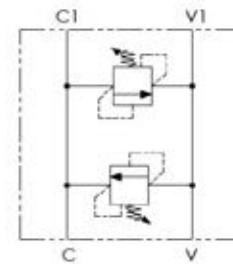
C - drain port, G 1/4", 9mm depth, infuse port in the housing
D - brake release port, G 1/4", 9mm depth

Typical system assembly



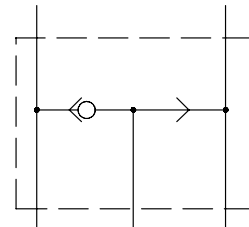
Cross Line Relief Valves

Part Number	List Price \$	Max Flow Rate	Pressure Range	Series	A+B Ports	Bolts
DCF1201	216.00	40 lpm	10-110 bar	BMP/BMR	1/2" BSPP	M8x40 cap screw
DCF1202	216.00		20-210 bar			
DCF1203	216.00		70-350 bar			
DCM1201	216.00		10-110 bar	BMSY		M10x40 cap screw
DCM1202	216.00		20-210 bar			
DCM1203	216.00		70-350 bar			



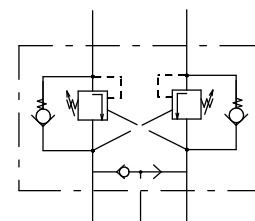
Shuttle Valves

Part Number	List Price \$	Max Flow Rate	Max Pressure	Series	A+B Ports	C Port	Bolts
FSRDB	263.00	60 lpm	300 bar	BMP/BMR	1/2" BSPP	1/4" BSPP	M8x40 cap screw (x4)
FSSDB	263.00			BMSY			M10x40 cap screw (x2)



Counter Balance Valves

Part Number	List Price \$	Max Flow Rate	Max Pressure	Series	A+B Ports	C Port	Bolts
FPRDDB	371.00	60 lpm	70-250 bar	BMP/BMR	1/2" BSPP	1/4" BSPP	M8x50 cap screw (x4)
CBDLSFOMS-03	618.00		100-350 bar	BMSY			M8x80 cap screw (x4)

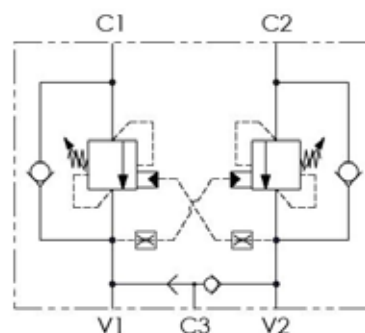


HYDRAULIC MOTORS

Hydraulic Motor Valves

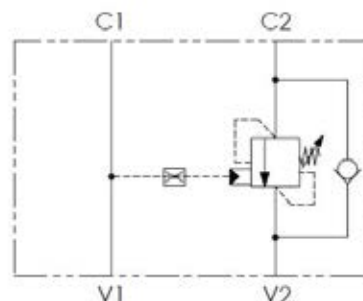
NEW Dual Counterbalance Valves (BMP/BMR)

Part Number	List Price \$	Max Flow Rate	Pressure Range	Series	A+B Ports	Ratio	Bolts
DCVB1201S	450.00	60 lpm	30-210 bar	BMP/BMR	1/2" BSPP	1:4.25	



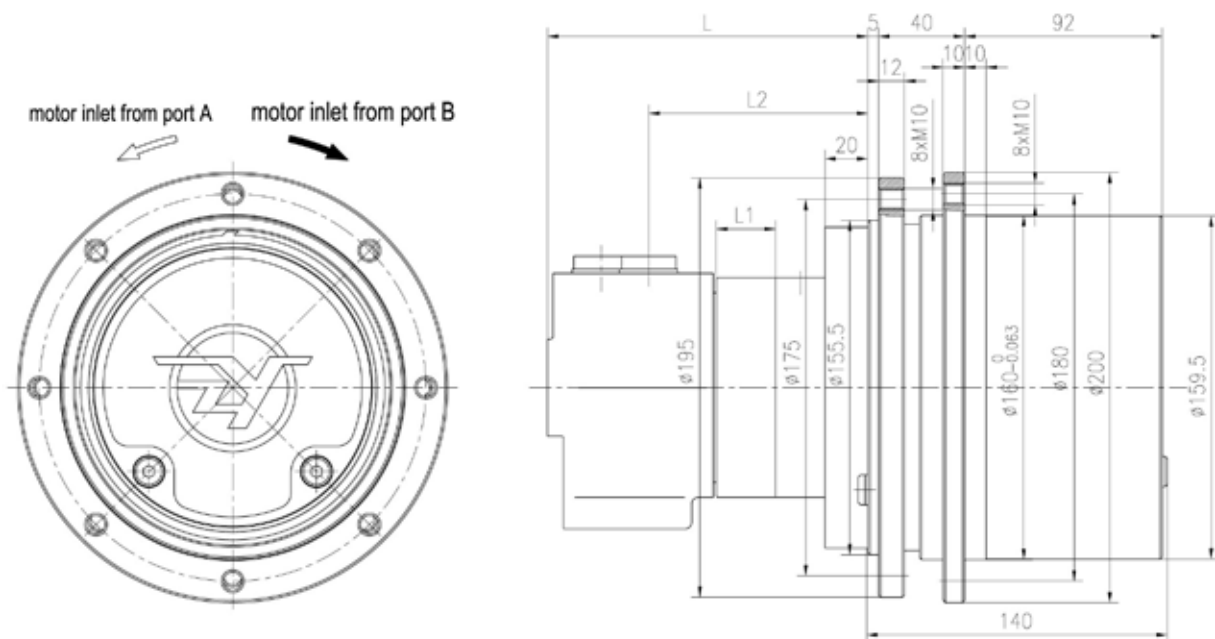
NEW Single Counterbalance Valves (BMP/BMR)

Part Number	List Price \$	Max Flow Rate	Pressure Range	Series	A+B Ports	Ratio	Bolts
SCVB1201S	405.00	60 lpm	30-210 bar	BMP/BMR	1/2" BSPP	1:4.25	



NEW Planetary Wheel Drive

Motor Info	BMS80	BMS100	BMS125	BMS160	BMS200	BMS250	BMS315	BMS400
List Price \$	3250.00	3320.00	3350.00	3370.00	3400.00	3420.00	3440.00	3480.00
L1 (mm)	13	17	22	27.5	35.1	47	59	71
L2 (mm)	69	73	78	83.5	91.1	103	115	127
L (mm)	134.5	138.5	143.5	149	157	169	181	193



WGB150 WITH BMS 125, Main specifications as follows

Main specifications of WGB 150

WGB150		5.75	4.6	3.28
specification Motor	Motor BMS125	125	125	125
	pressure drop MPa	15.4	15.4	16.2
	flow L/min	73.3	73.3	69.7
	torque N·m	260.9	260.9	274.4
	speed rpm	539.5	539.5	512.9
Output speed rpm		93.8	117.3	156.4
Output torque N·m		1500	1200	900
Output power kW		14	14	14

Main specifications of the non-standard motor with WGB150 will be calculated upon hydraulic motor.
The max. output torque of WGB 150 is 1500 Nm, the max. output power is 14 kW.

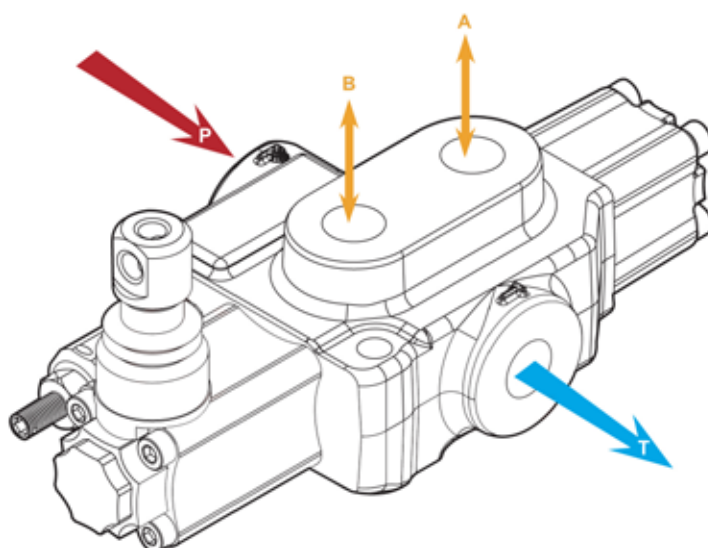
MB2 Monoblock 45 lpm	224
MB2 Options	225
MB3 Monoblock 45 lpm	226
MB3 Options	227
MB4 Monoblock 60 lpm	229
MB4 Options	230
MB5 Monoblock 80 lpm	231
MB5 Options	232
MB6 Monoblock 120 lpm	233
MB6 Options	234
Remote Control Accessories	235
Log Splitter Valves	236

MONOBLOCK VALVES

MB2

MB2 Monoblock - 45 lpm

Part Number	List Price \$	Spool	Quantity	Max Flow	Max Pressure	Ports
MB2/1S3/18L/G3	216.00	Cylinder	1	45 lpm	250 bar	3/8" BSPP
MB2/1S3/28L/G3	216.00	Motor				



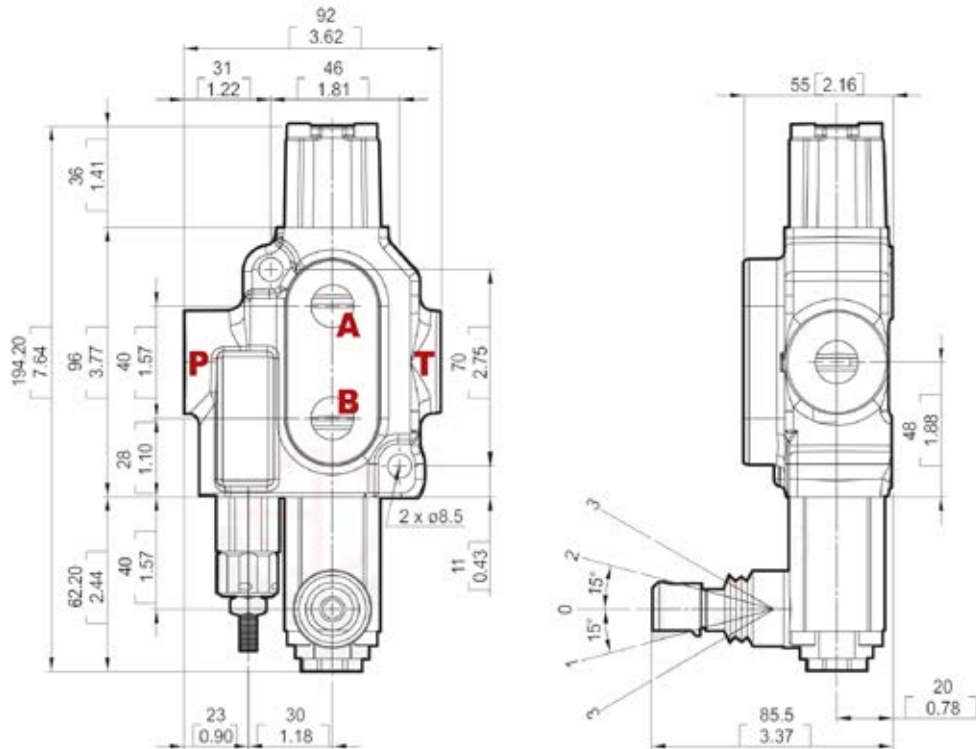
No power beyond in MB2

Relief valve standard
63-200 bar range



MB2 Options

Part Number	List Price \$	Description
YLMB24061	49.00	MB2 Detent in A-B, no spring centre
YLMB24062	57.00	MB2 Detent in A only, no spring centre
YLMB24063	57.00	MB2 Detent in B only, no spring centre
YLMB24008	26.00	B-Side Spring centred cap
YLMB24081	31.00	MB2 2 Position kit, spring centred from pos.1
YLMB24082	31.00	MB2 2 Position kit, spring centred from pos.2
YLMB24200	49.00	MB2 B-Side Cable connector kit
YLMB24092	70.00	Detent in A and spring centred spool
YLMB24093	70.00	Detent in B and spring centred spool
YLMB24801	160.00	Microswitch kit operated in pos.1 (Normally Open)
YLMB24802	160.00	Microswitch kit operated in pos.2 (Normally Open)
YLMB24803	160.00	Microswitch kit operated in pos.1&2 (Normally Open)
YLMB23001	64.00	MB2 Cylinder Spool
YLMB23002	64.00	MB2 Motor Spool
YLMB23003	72.00	MB2 Single Acting Spool on A; B port plugged
YLMB23004	72.00	MB2 Single Acting Spool on B; A port plugged



MONOBLOCK VALVES

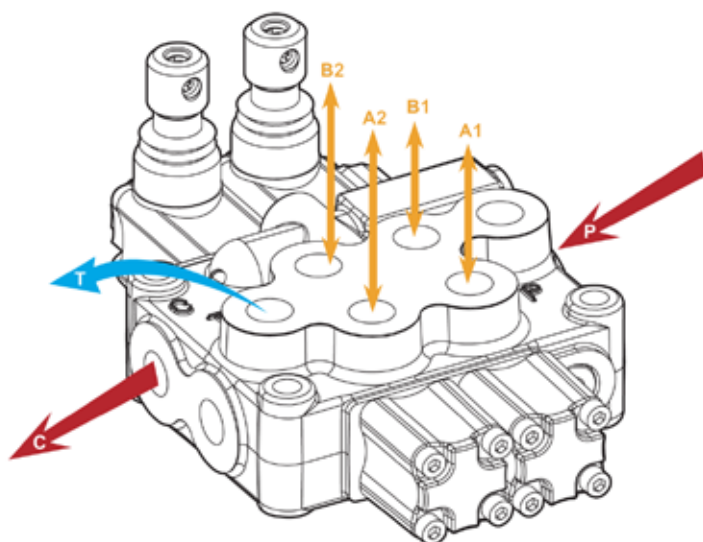
MB3

MB3 Monoblock - 45 lpm

Part Number	List Price \$	Spool	Quantity	Max Flow	Max Pressure	Ports
MB3/1S3/18L/G4-3-4	258.00	Cylinder	1	45 lpm	315 bar (25 Bar on T)	1/2" BSPP (P,T,C) 3/8" BSPP (A,B)
MB3/1S3/28L/G4-3-4	258.00	Motor				
MB3/1S3/48L/G4-3-4	268.00	Single Acting				
MB3/2S3/18L/G4-3-4	402.00	Cylinder	2			
MB3/3S3/18L/G4-3-4	433.00		3			
MB3/4S3/18L/G4-3-4	670.00		4			
MB3/5S3/18L/G4-3-4	814.00		5			
MB3/6S3/18L/G4-3-4	948.00		6			

MB3 Monoblock with Float Spools

Part Number	List Price \$	Spool	Quantity	Max Flow	Max Pressure	Ports
MB3/1S3/5PYL/G4-3-4	397.00	Cylinder with float	1	45 lpm	315 bar (25 Bar on T)	1/2" BSPP (P,T,C)
MB3/2S3/5PYL/G4-3-4	675.00		2			
MB3/2S3/18L/5PYL/G4-3-4	577.00	Cylinder	2			
		Cylinder with float				

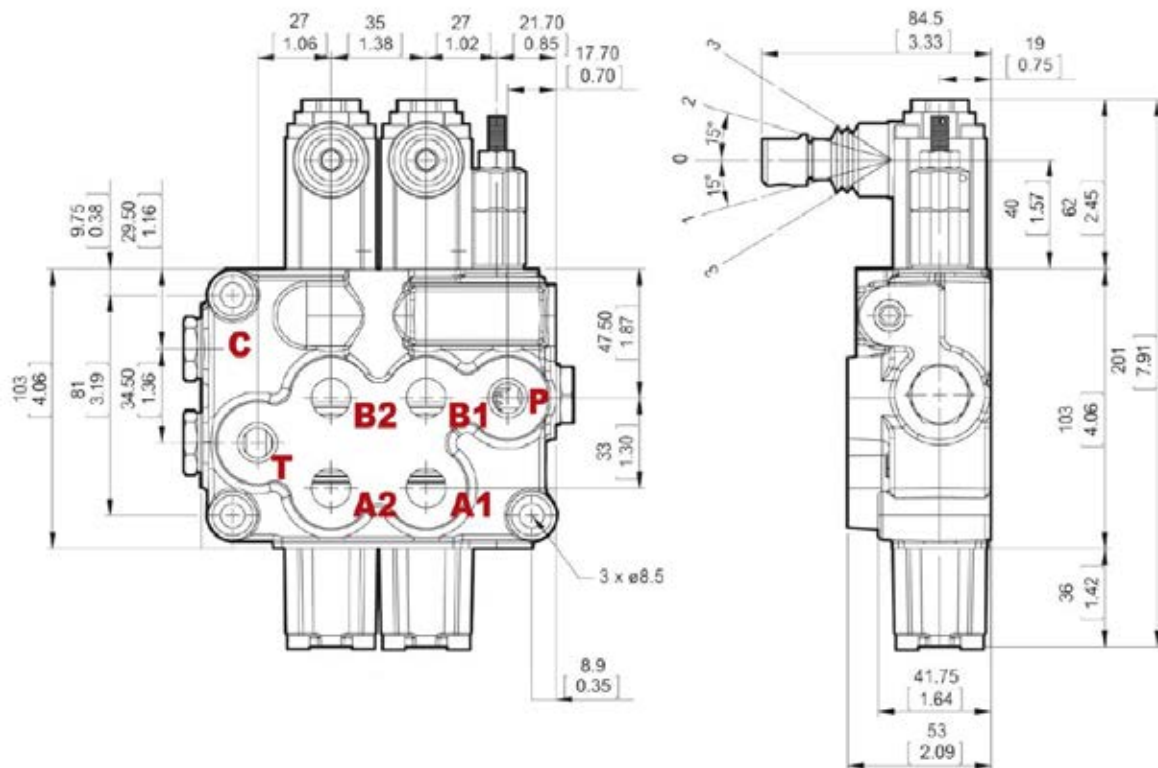


Power Beyond plug
with every kit

Relief valve standard
63-200 bar range

MB3 Options

Part Number	List Price \$	Description
YLMB08160	14.00	Replacement Lever M8 x 160mm
YLMB3SEAL	5.00 > 26.00	Seal kit MB3 - advise number of spools
YLMB33002	66.00	Motor spool
YLMB33003	75.00	Single acting spool on A port
YLMB33004	75.00	Single acting spool on B port
YLMB44061	48.00	Detent kit, no spring to centre (variations available)
YLMB44091	70.00	Detent kit, spring to centre (variations available)
YLMB44080	201.00	Pneumatic spool positioner
YLMB440810	58.00	Hydraulic Pilot Kit - maximum pressure 50 bar (lever not included - see page 235)
YLMB44300-12V	427.00	Electro-pneumatic spool positioner, 12v DC
YLMB44300-24V	427.00	Electro-pneumatic spool positioner, 24v DC
YLMB44803	160.00	Microswitch kit, normally open, double acting (variations available)
YLMB44805	175.00	Microswitch kit, normally open, double acting for float spool (5PYL)
YLMB45000	41.00	Replacement lever box
YLMB32002	72.00	Relief valve 40-80 bar
YLMB32003	72.00	Relief valve 63-200 bar
YLMB32004	72.00	Relief valve 160-315 bar



MONOBLOCK VALVES

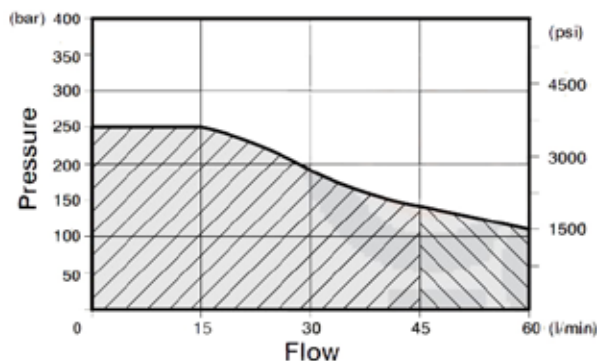
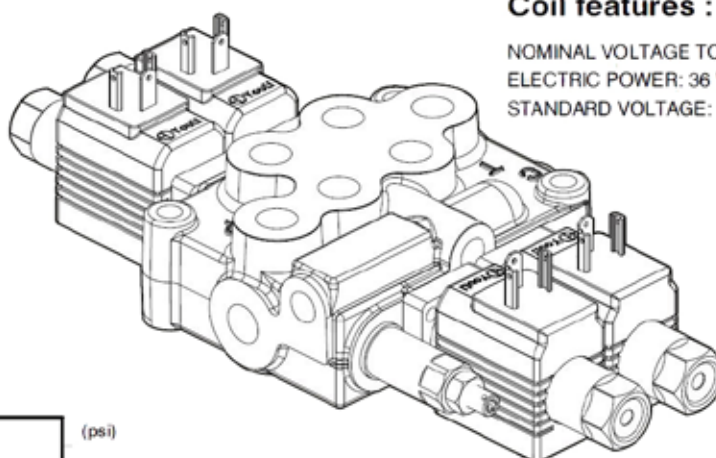
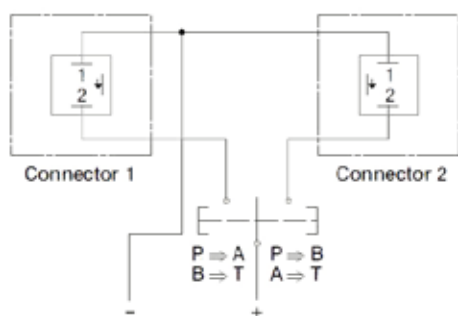
MB3

MB3 Options

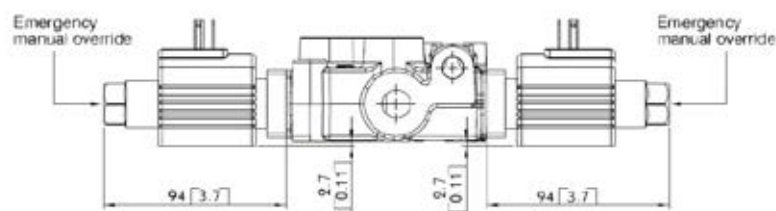
Part Number	List Price \$	Description
YLMB34511	469.00	MB3 8ES3 Kit, DA Cylinder Spool, 12VDC
YLMB34521	469.00	MB3 8ES3 Kit, DA Motor Spool, 12VDC
YLMB34512	469.00	MB3 8ES3 Kit DA, Cylinder Spool, 24VDC
YLMB34522	469.00	MB3 8ES3 Kit DA, Motor Spool, 24VDC
YLMB34511L	597.00	MB3 8ES3 Kit DA, Cylinder Spool, 12VDC with Lever
YLMB34521L	597.00	MB3 8ES3 Kit DA, Motor Spool, 12VDC with Lever
YLMB34512L	597.00	MB3 8ES3 Kit DA, Cylinder Spool, 24VDC with Lever
YLMB34522L	597.00	MB3 8ES3 Kit DA, Motor Spool, 24VDC with Lever
YLMB8ES001	13.00	MB3 8ES Coil Retaining Nut
YLMB8ES12D	144.00	MB3 8ES Coil 12VDC
YLMB8ES24D	144.00	MB3 8ES Coil 24VDC

Coil features :

NOMINAL VOLTAGE TOLERANCE: $\pm 10\%$
 ELECTRIC POWER: 36 W
 STANDARD VOLTAGE: 12 VDC / 24 VDC



Nominal flow rating		45 L/min	12 US gpm
Operating pressure (Max.)		250 bar	3650 psi
Back pressure (Max.)	on outlet port T	5 bar	70 psi
Fluid temperature	with NBR seals	-20°C~80°C	-4°F~176°F
	with FPM seals	-20°C~100°C	-4°F~212°F
Viscosity	Operating range	15mm ² /s~75mm ² /s	15~75 cst
	Max.	400mm ² /s	400 cst
	Min.	12mm ² /s	12 cst
Ambient temperature		-40°C~60°C	-40°F~140°F
Internal Leakage A(B)→T	$\Delta P = 100\text{bar at } 40^\circ\text{C}$	10 cm ³ /min	0.61 in ³ /min

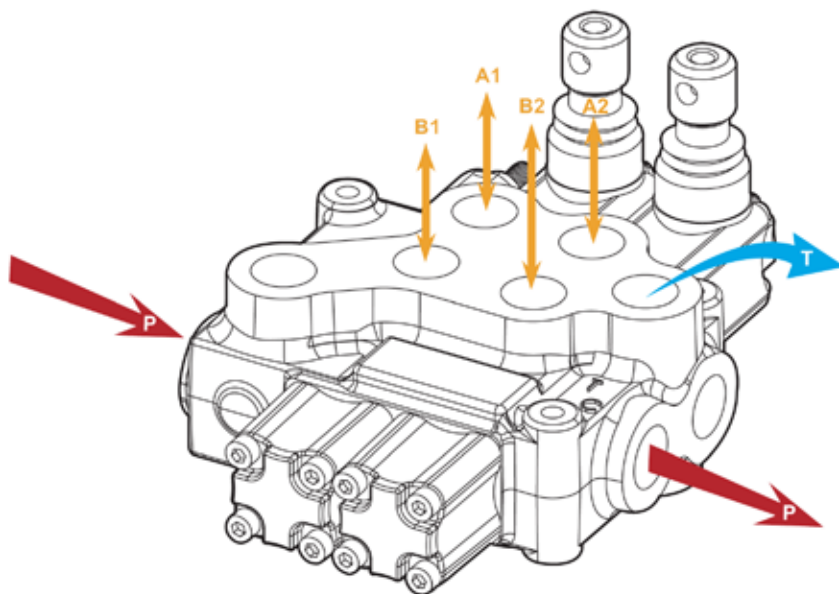


8ES3 Kit:

ACTING IN 1 & 2

MB4 Monoblock - 60 lpm

Part Number	List Price \$	Spool	Quantity	Max Flow	Max Pressure	Ports
MB4/1S3/18L/G4	309.00	Cylinder	1	60 lpm	315 bar (25 Bar on T)	1/2" BSPP
MB4/1S3/28L/G4	309.00	Motor				
MB4/1S3/48L/G4	319.00	Single acting				
MB4/2S3/18L/G4	489.00	Cylinder	2			
MB4/3S3/18L/G4	664.00		3			
MB4/4S3/18L/G4	845.00		4			
MB4/5S3/18L/G4	1020.00		5			
MB4/6S3/18L/G4	1185.00		6			



Power Beyond plug
with every kit

Relief valve standard
63-200 bar range

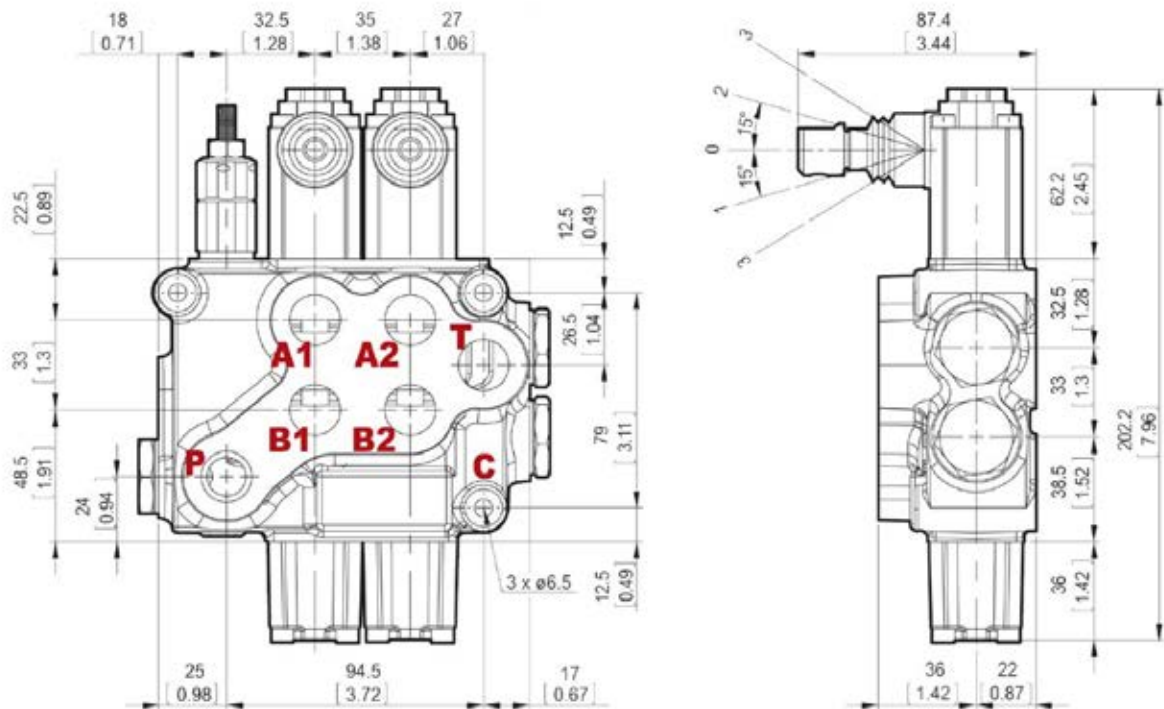


MONOBLOCK VALVES

MB4

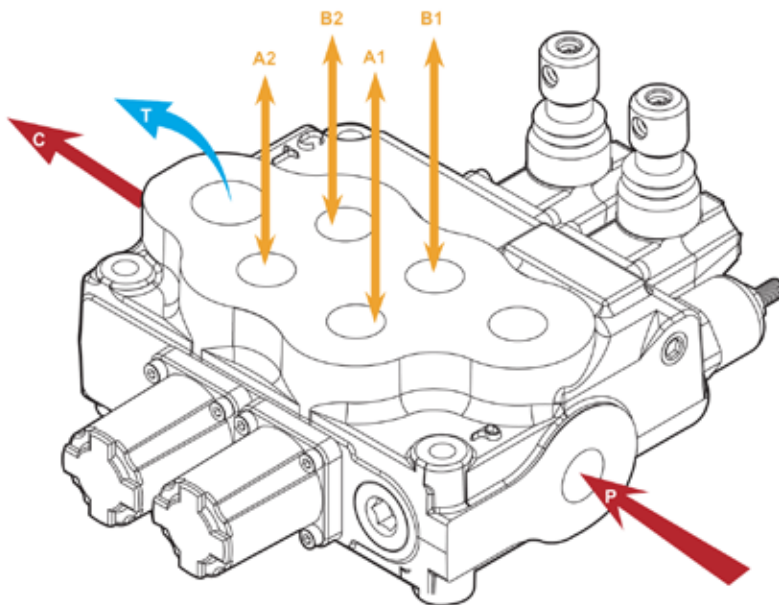
MB4 Options

Part Number	List Price \$	Description
YLMB08160	14.00	Replacement Lever M8 x 160mm
YLMB4SEAL	5.00 > 31.00	Seal kit MB4 - advise number of spools
YLMB43002	66.00	Motor spool
YLMB43003	75.00	Single acting spool on A port
YLMB43004	75.00	Single acting spool on B port
YLMB44061	48.00	Detent kit, no spring to centre (variations available)
YLMB44091	70.00	Detent kit, spring to centre (variations available)
YLMB44080	201.00	Pneumatic spool positioner
YLMB440810	58.00	Hydraulic pilot kit - maximum pressure 50 bar (lever not included - see page 235)
YLMB44300-12V	427.00	Electro-pneumatic spool positioner, 12v DC
YLMB44300-24V	427.00	Electro-pneumatic spool positioner, 24v DC
YLMB44803	160.00	Microswitch kit, normally open, double acting (variations available)
YLMB44805	175.00	Microswitch kit, normally open, double acting for float spool (5PYL)
YLMB45000	41.00	Replacement lever box



MB5 Monoblock - 80 lpm

Part Number	List Price \$	Spool	Quantity	Max Flow	Max Pressure	Ports
MB5/1S3/18L/G8-6-8	438.00	Cylinder	1	80 lpm	315 bar (25 bar on T)	1" BSPP (P,T) 3/4" BSPP (C,A,B)
MB5/1S3/28L/G8-6-8	438.00	Motor				
MB5/1S3/48L/G8-6-8	448.00	Single Acting				
MB5/2S3/18L/G8-6-8	644.00	Cylinder	2			
MB5/3S3/18L/G8-6-8	834.00		3			
MB5/4S3/18L/G8-6-8	1030.00		4			
MB5/5S3/18L/G8-6-8	1246.00		5			
MB5/6S3/18L/G8-6-8	1494.00		6			



Power Beyond plug
not included

Relief valve standard
125-250 bar range

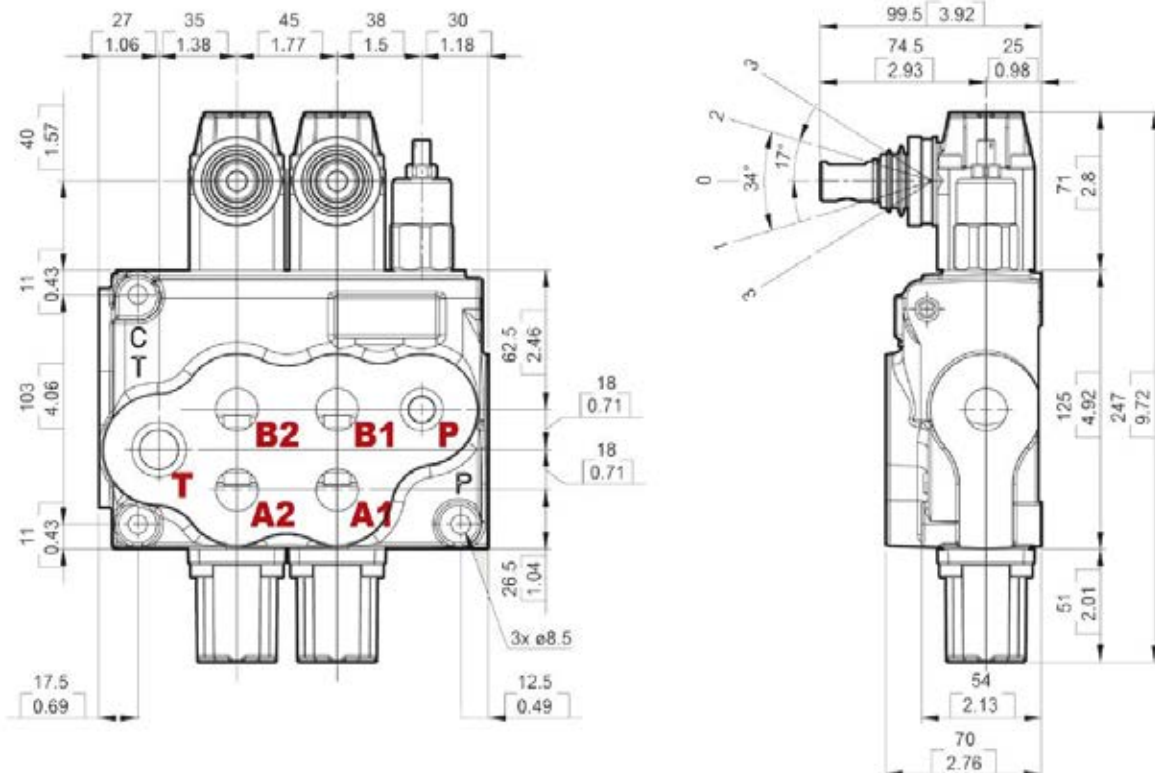


MONOBLOCK VALVES

MB5

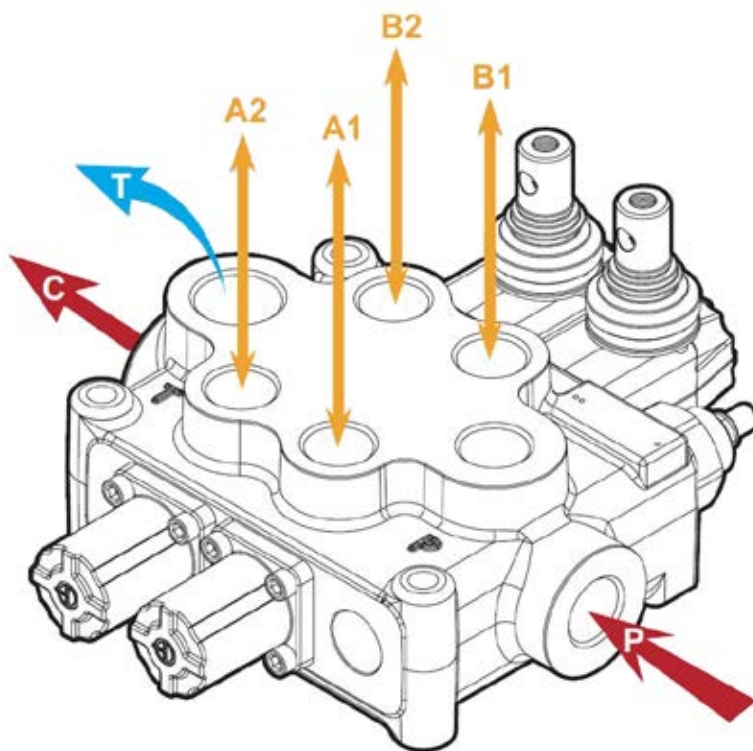
MB5 Options

Part Number	List Price \$	Description
YLMB10200	29.00	Replacement lever M10 x 200mm
YLMB5SEAL	10.00 > 67.00	Seal kit MB5 - advise number of spools
YLMB53002	124.00	Motor spool
YLMB53003	134.00	Single acting spool on A port
YLMB53004	134.00	Single acting spool on B port
YLMB54061	80.00	Detent kit, no spring to centre (variations available)
YLMB54091	175.00	Detent kit, spring to centre (variations available)
YLMB54080	242.00	Pneumatic spool positioner
YLMB540810	124.00	Hydraulic Pilot Kit - maximum pressure 50 bar (lever not included - see page 235)
YLMB54300-12V	469.00	Electro-pneumatic spool positioner, 12v DC
YLMB54300-24V	469.00	Electro-pneumatic spool positioner, 24v DC
YLMB5COPG4	29.00	Power beyond plug G1/2" female
YLMB5COPG6	29.00	Power beyond plug G3/4" female
YLMB54803	201.00	Microswitch kit, normally open, double acting (variations available)
YLMB55000	56.00	Replacement lever box
RCC5/1S/HL	258.00	Remote manual lever
YLMB52002	165.00	Relief valve 80-160 bar
YLMB52003	165.00	Relief valve 125-250 bar
YLMB52004	165.00	Relief valve 200-315 bar
YLX2100	335.00	Pilot operated 25-315 bar



NEW MB6 Monoblock - 120 lpm

Part Number	List Price \$	Spool	Quantity	Max Flow	Max Pressure	Ports
MB6/1S3/18L/G8-6-8	650.00	Cylinder	1	120 lpm	315 bar (25 bar on T)	1.1/4" BSPP (T,C)
MB6/1S3/28L/G8-6-8	650.00	Motor				
MB6/1S3/48L/G8-6-8	650.00	Single Acting				
MB6/2S3/18L/G8-6-8	953.00	Cylinder	2			1" BSPP (P,A,B)
MB6/3S3/18L/G8-6-8	1256.00		3			
MB6/4S3/18L/G8-6-8	1560.00		4			



Power Beyond plug
not included

Relief valve standard
125-250 bar range

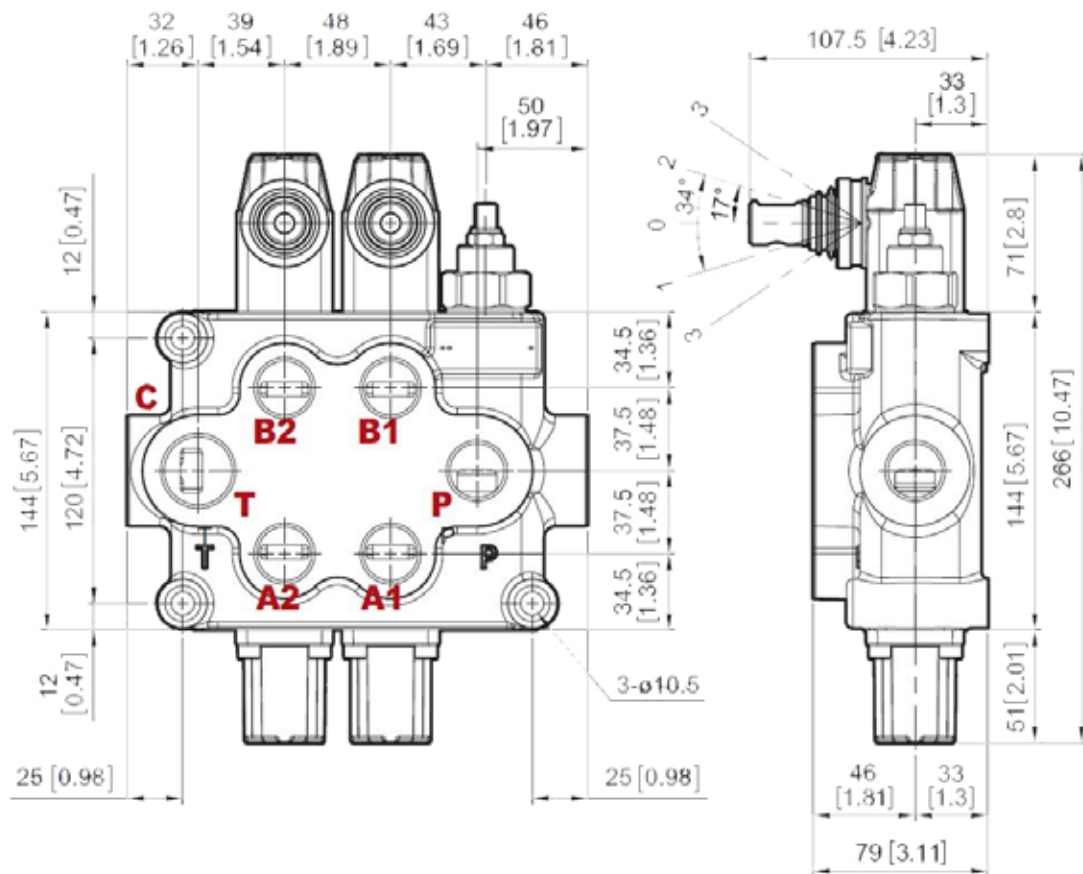


MONOBLOCK VALVES

MB6

MB6 Options

Part Number	List Price \$	Description
YLMB63002	140.00	Motor Spool
YLMB63003	150.00	Single Acting Spool on A Port
YLMB63004	150.00	Single Acting Spool on B Port
YLMB64061	74.00	Detent kit, no spring to centre (variations available)
YLMB64080	220.00	Pneumatic Spool Positioner
YLMB64300-12V	485.00	Electro-Pneumatic Spool Positioner - 12v DC
YLMB64300-24V	485.00	Electro-Pneumatic Spool Positioner - 24v DC
2BMTX01954	55.00	Power Beyond Plug
YLPSN63000	335.00	Pilot Operated Relief Valve (25-315 bar)
YLPSN64000	37.00	Relief Valve Blank Plug



Cable Control

Part Number	List Price \$	Description
RCC-3/1S/HL	227.00	Remote lever for cable control MB2,3,4
RCC-5/1S/HL	258.00	Remote lever for cable control MB5
FCR-2	391.00	Joystick for cable control, dual axis
YLMB45003	52.00	Cable Connector, spool to joystick cable, MB2,3,4
YLMB55003	93.00	Cable Connector, spool to joystick cable, MB5
YLMBCABLE1M	170.00	Cable 1 Metre
YLMBCABLE1.5M	175.00	Cable 1.5 Metre
YLMBCABLE2M	185.00	Cable 2 Metre
YLMBCABLE2.5M	196.00	Cable 2.5 Metre
YLMBCABLE3M	206.00	Cable 3 Metre


Hydraulic Pilot Controllers

Part Number	List Price \$	Description	Axis	Flow	Inlet Pres. Range	A&B Outlet Pres. Range
JHP-1/1S-G2/8-A01B	386.00	Spring centre	Single	5-20 lpm	30-100 bar	5-19 bar
JHP-1/1S-G2/9-1-A01B	458.00	Spring centre friction detent				
JHP-1/1S-G2/FD-A01B	453.00	Friction detent				
JHP-1/1S-G2/LES-A01B	484.00	Safety lever detent in neutral				
JHP-2/01-G2/01-LCB-B02B	901.00	Spring centre	Dual			6-25 bar

Note: All hydraulic pilot controllers are suitable with sectional valves, proportional valves and monoblock valves (excluding MB2 series)

Direct Mount Joystick

Part Number	List Price \$	Description
YLMB45002	191.00	Dual axis direct mount joystick, MB3/MB4
YLMB55002	196.00	Dual axis direct mount joystick, MB5

MONOBLOCK VALVES

Log Splitter Valves

Log Splitter Valves

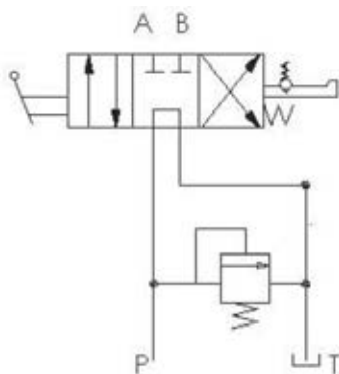
Part Number	List Price \$	Max Flow	Max Pressure	P/T Ports	A/B Ports
LSV81303400	319.00	80 lpm	3265 PSI	3/4" BSPP	1/2" BSPP
LSV81035340	381.00	120 lpm			

Relief valve preset to 2250psi

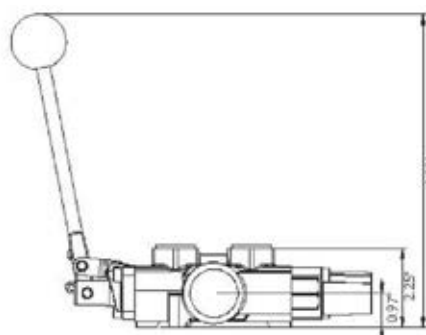
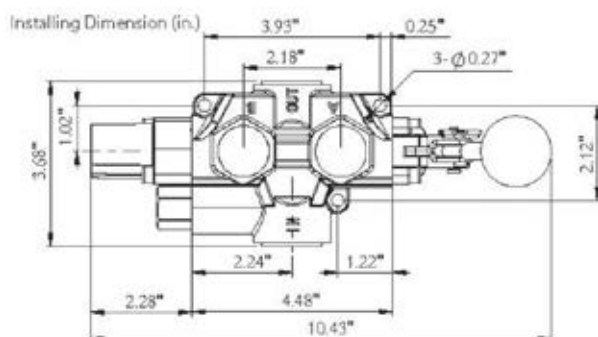
Kickout pressure is preset to 800psi, non-adjustable

Maximum tank pressure 500psi

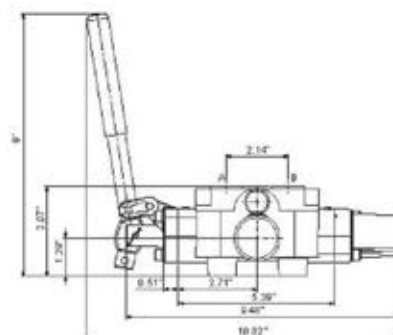
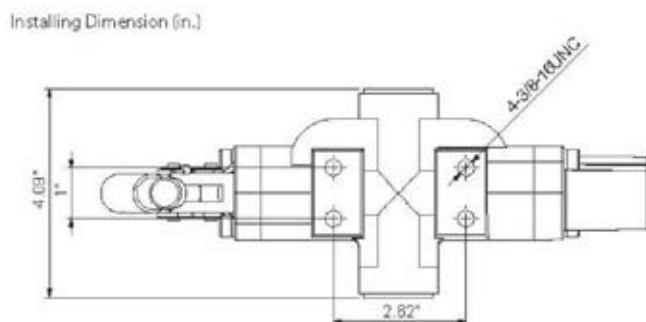
Recommended filtration 10micron



LSV81303400



LSV81035340



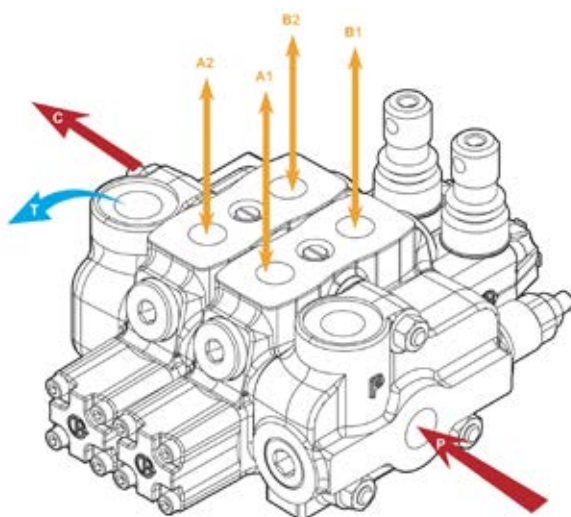
SN3 Sectional Valves	238
SN3 Options	239
SN4 Sectional Valves	240
SN4 Options	241
SN6 Sectional Valves	242
SN6 Options	243
SN8 Sectional Valves	244
SN8 Options	245
Remote Control Accessories	246

SECTIONAL VALVES

SN3

SN3 Sectional Valves

Part Number	List Price \$	Spool	Quantity	Max Flow	Max Pressure	Ports
SN3/1S3/18L/P3T/G3-4	688.00	Cylinder (Standard)	1	50 lpm	315 bar (25 bar on T)	1/2" BSPP (T,C) 3/8" BSPP (P,A,B)
SN3/2S3/18L/P3T/G3-4	1027.00		2			
SN3/3S3/18L/P3T/G3-4	1370.00		3			
SN3/4S3/18L/P3T/G3-4	1710.00		4			
SN3/5S3/18L/P3T/G3-4	2055.00		5			
SN3/6S3/18L/P3T/G3-4	2390.00		6			
SN3/7S3/18L/P3T/G3-4	2740.00		7			
SN3/8S3/18L/P3T/G3-4	3080.00		8			
SN3/9S3/18L/P3T/G3-4	3420.00		9			
SN3/10S3/18L/P3T/G3-4	3768.00		10			
SN3/11S3/18L/P3T/G3-4	4110.00		11			
SN3/12S3/18L/P3T/G3-4	4450.00		12			



Power Beyond plug
with every kit

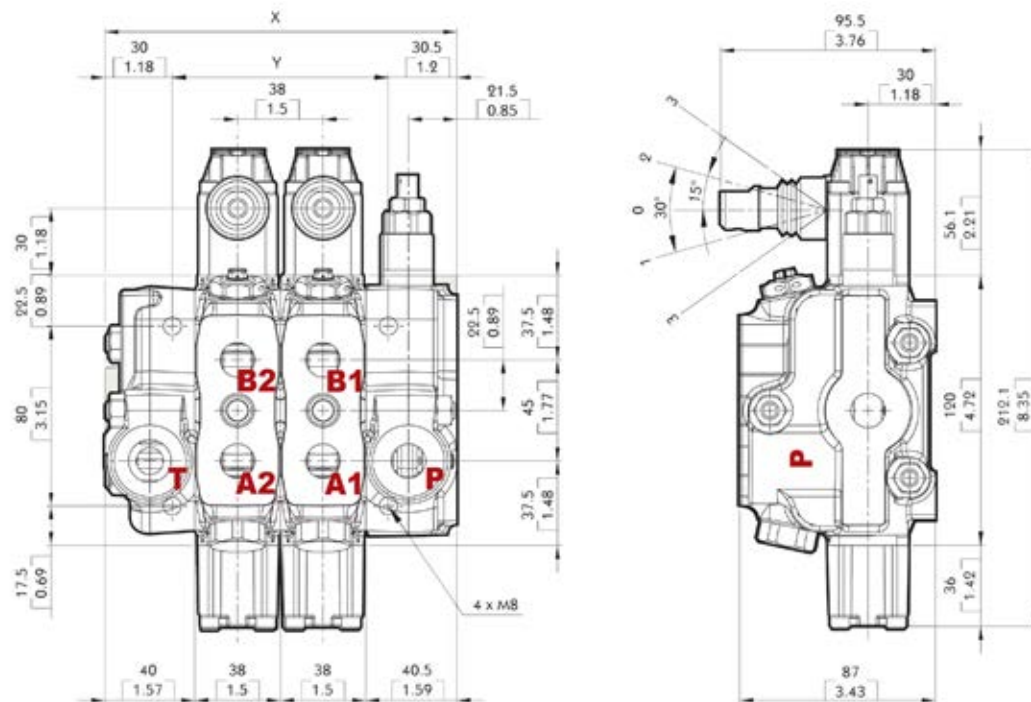
Relief valve standard
63-200 bar range
Standard setting 120 bar

Port cavities in all sections

Series sections available
Max 210 bar

SN3 Options

Part Number	List Price \$	Description
YLPSN33000	294.00	Pilot operated relief 25-315 bar
YLPSN33004	134.00	Relief valve 160-315 bar
YLWSN08160	14.00	Replacement lever M8 x 160mm
YLWSN32002	77.00	Motor spool (No.2)
YLWSN32003	88.00	Single acting spool on A port
YLWSN32004	88.00	Single acting spool on B port
YLWSN33061	57.00	Detent kit, no spring to centre (variations available)
YLWSN33091	70.00	Detent kit, spring to centre (variations available)
YLWSN33080	232.00	Pneumatic spool positioner
YLWSN330810	58.00	Hydraulic pilot kit - maximum pressure 50 bar (lever not included, see page 246)
YLWSN34002	191.00	Joystick for 2 spool operation
YLWSN34300-12V	458.00	Electro-pneumatic spool positioner, 12v DC
YLWSN34300-24V	458.00	Electro-pneumatic spool positioner, 24v DC
YLWSN34803	170.00	Microswitch kit, normally open (variations available)
YLWSN35002	103.00	Anti shock valve 63-125 bar
YLWSN35003	103.00	Anti shock valve 100-250 bar
YLWSN35004	103.00	Anti shock valve 200-315 bar
YLWSN35012	113.00	Anti shock & anti cavitation valve 63-125 bar
YLWSN35013	113.00	Anti shock & anti cavitation valve 100-250 bar
YLWSN35014	113.00	Anti shock & anti cavitation valve 200-315 bar
YLWSN35100	103.00	Anti cavitation valve

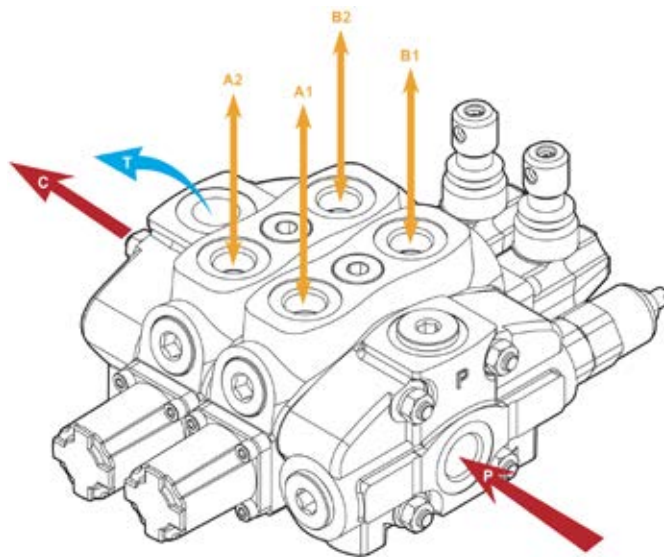


SECTIONAL VALVES

SN4

SN4 Sectional Valves

Part Number	List Price \$	Spool	Quantity	Max Flow	Max Pressure	Ports
SN4/1S3/18L/P3T/G4-6	857.00	Cylinder (Standard)	1	80 lpm	315 bar (25 bar on T)	3/4" BSPP (T,C) 1/2" BSPP (P,A,B)
SN4/2S3/18L/P3T/G4-6	1246.00		2			
SN4/3S3/18L/P3T/G4-6	1658.00		3			
SN4/4S3/18L/P3T/G4-6	2050.00		4			
SN4/5S3/18L/P3T/G4-6	2843.00		5			
SN4/6S3/18L/P3T/G4-6	3245.00		6			
SN4/7S3/18L/P3T/G4-6	3642.00		7			
SN4/8S3/18L/P3T/G4-6	4038.00		8			
SN4/9S3/18L/P3T/G4-6	4429.00		9			
SN4/10S3/18L/P3T/G4-6	4838.00		10			
SN4/11S3/18L/P3T/G4-6	5232.00		11			
SN4/12S3/18L/P3T/G4-6	5634.00		12			



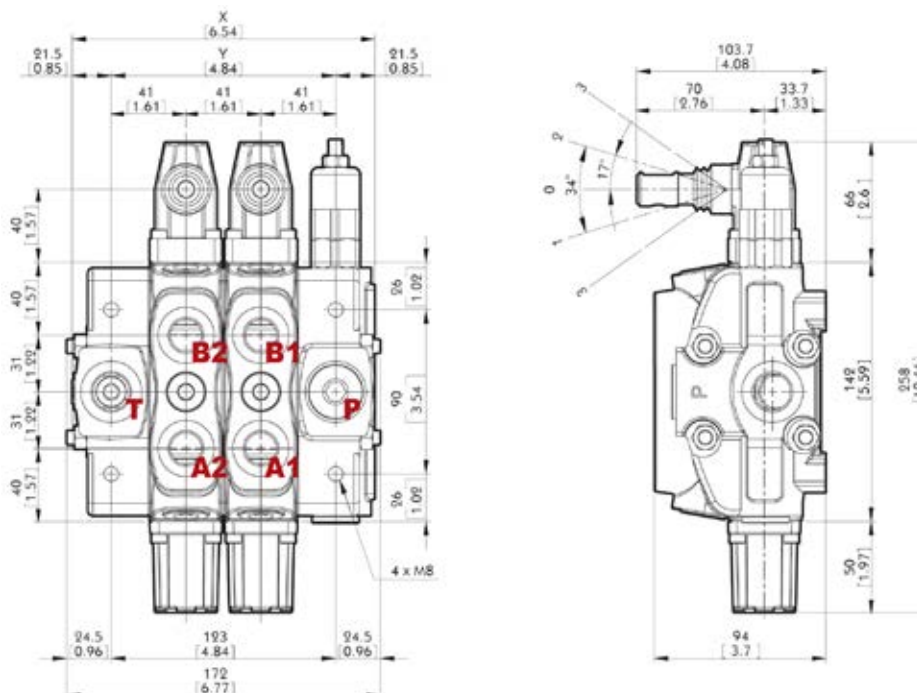
Power Beyond plug
with every kit

Relief valve standard
125-250 bar range
Standard setting 175 bar



SN4 Options

Part Number	List Price \$	Description
YLPSN43003	165.00	Relief valve 125-250 bar
YLPSN43004	165.00	Relief valve 200-315 bar
YLX2100	335.00	Pilot operated relief valve 25-315 bar
YLWSN10200	29.00	Replacement Lever M10 x 200mm
YLWSN42002	155.00	Motor spool (No.2)
YLWSN42003	165.00	Single acting spool on A port
YLWSN43061	82.00	Detent kit, no spring to centre (variations available)
YLWSN43091	175.00	Detent kit, spring to centre (variations available)
YLWSN43080	237.00	Pneumatic spool positioner
YLWSN43803	201.00	Microswitch kit, normally open (variations available)
YLWSN44002	206.00	Joystick for 2 spool operation
YLWSN44300-12V	469.00	Electro-pneumatic spool positioner, 12v DC
YLWSN44300-24V	469.00	Electro-pneumatic spool positioner, 24v DC
YLWSN45002	129.00	Anti shock valve 63-125 bar
YLWSN45003	129.00	Anti shock valve 100-250 bar
YLWSN45004	129.00	Anti shock valve 200-315 bar
YLWSN45012	144.00	Anti shock & anti cavitation valve 63-125 bar
YLWSN45013	144.00	Anti shock & anti cavitation valve 100-250 bar
YLWSN45014	144.00	Anti shock & anti cavitation valve 200-315 bar
YLWSN45100	134.00	Anti cavitation valve
YLWSN430810	124.00	Hydraulic pilot kit - maximum pressure 50 bar (lever not included, see page 246)
EWSN-4/1KOL-G4/M3	757.00	Pressure kickout (log valve)

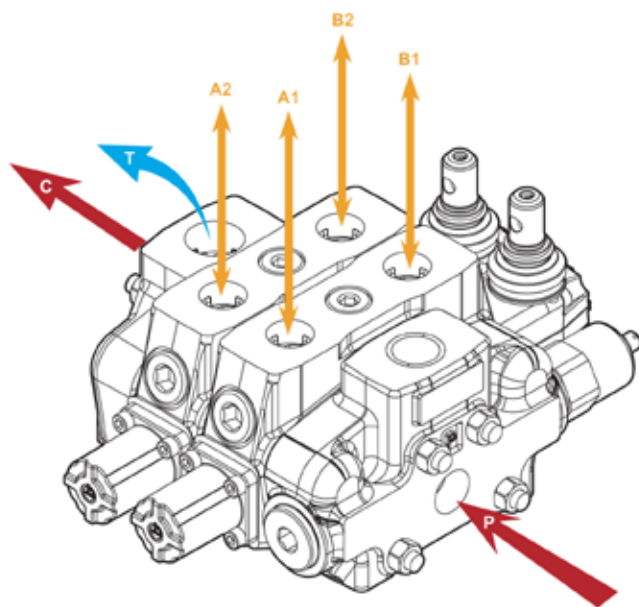


SECTIONAL VALVES

SN6

SN6 Sectional Valves

Part Number	List Price \$	Spool	Quantity	Max Flow	Max Pressure	Ports
SN6/1S3/18L/P3T/G6-1	1391.00	Cylinder (Standard)	1	140 lpm	315 bar (25 bar on T)	1" BSPP (T) 3/4" BSPP (P,A,B,C)
SN6/2S3/18L/P3T/G6-1	2034.00		2			
SN6/3S3/18L/P3T/G6-1	2678.00		3			
SN6/4S3/18L/P3T/G6-1	3296.00		4			
SN6/5S3/18L/P3T/G6-1	3976.00		5			
SN6/6S3/18L/P3T/G6-1	4594.00		6			
SN6/7S3/18L/P3T/G6-1	5243.00		7			
SN6/8S3/18L/P3T/G6-1	5892.00		8			
SN6/9S3/18L/P3T/G6-1	6520.00		9			
SN6/10S3/18L/P3T/G6-1	7962.00		10			
SN6/11S3/18L/P3T/G6-1	7828.00		11			
SN6/12S3/18L/P3T/G6-1	8446.00		12			



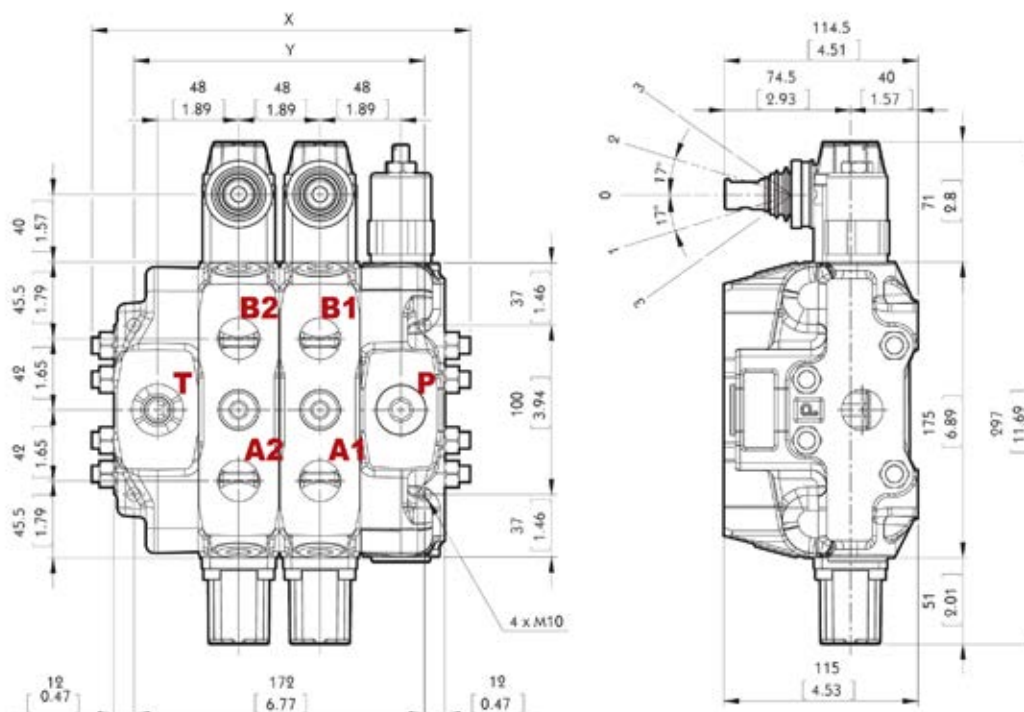
Power Beyond plug
with every kit

Relief valve standard
25-315 bar range
Standard setting 125 bar

Port cavities in all sections

SN6 Options

Part Number	List Price \$	Description
YLPSN63000	335.00	Relief valve 25-315 bar
YLPSN63003	206.00	Relief Valve 125-250 bar
YLWSN10200	29.00	Replacement Lever M10 x 200mm
YLWSN62002	155.00	Motor spool (No.2)
YLWSN62003	165.00	Single acting spool on A port
YLWSN63061	124.00	Detent kit, no spring to centre (variations available)
YLWSN63091	232.00	Detent kit, spring to centre (variations available)
YLWSN63080	237.00	Pneumatic spool positioner
YLWSN63803	216.00	Microswitch kit, normally open (variations available)
YLWSN630810	124.00	Hydraulic pilot kit - maximum pressure 50 bar (lever not included, see page 246)
YLSWN64002	206.00	Joystick for 2 spool operation
YLWSN64300-12V	467.00	Electro-pneumatic spool positioner, 12v DC
YLWSN64300-24V	467.00	Electro-pneumatic spool positioner, 24v DC
YLWSN65002	201.00	Anti shock valve 63-125 bar
YLWSN65003	201.00	Anti shock valve 100-250 bar
YLWSN65004	201.00	Anti shock valve 200-315 bar
YLWSN65012	263.00	Anti shock & anti cavitation valve 63-125 bar
YLWSN65013	263.00	Anti shock & anti cavitation valve 100-250 bar
YLWSN65014	263.00	Anti shock & anti cavitation valve 200-315 bar
YLWSN65100	191.00	Anti cavitation valve

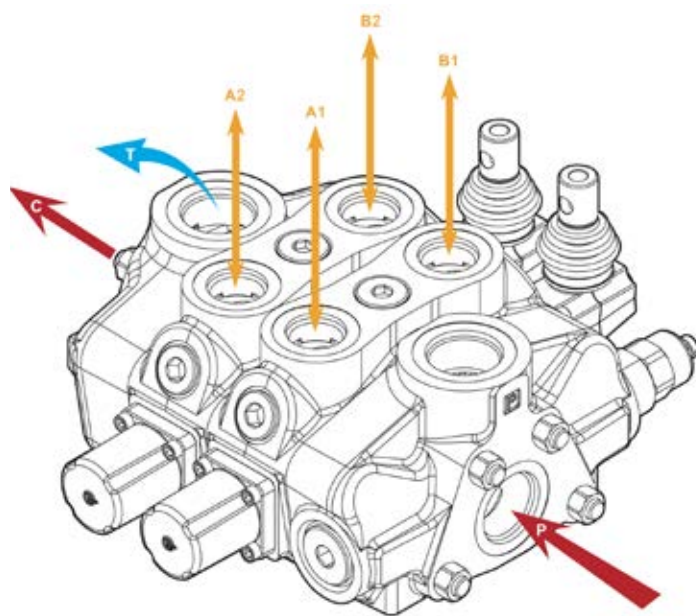


SECTIONAL VALVES

SN8

SN8 Sectional Valves

Part Number	List Price \$	Spool	Quantity	Max Flow	Max Pressure	Ports
SN8/1S3/18L/P3T/G8-8-10	2297.00	Cylinder (Standard)	1	220 lpm	315 bar (25 bar on T)	1.1/4" BSPP (T) 1" BSPP (P,A,B,C)
SN8/2S3/18L/P3T/G8-8-10	3451.00		2			
SN8/3S3/18L/P3T/G8-8-10	4424.00		3			
SN8/4S3/18L/P3T/G8-8-10	5469.00		4			
SN8/5S3/18L/P3T/G8-8-10	6530.00		5			
SN8/6S3/18L/P3T/G8-8-10	7591.00		6			
SN8/7S3/18L/P3T/G8-8-10	8652.00		7			
SN8/8S3/18L/P3T/G8-8-10	9713.00		8			
SN8/9S3/18L/P3T/G8-8-10	10774.00		9			
SN8/10S3/18L/P3T/G8-8-10	11845.00		10			
SN8/11S3/18L/P3T/G8-8-10	12927.00		11			
SN8/12S3/18L/P3T/G8-8-10	13987.00		12			



Power Beyond plug
with every kit

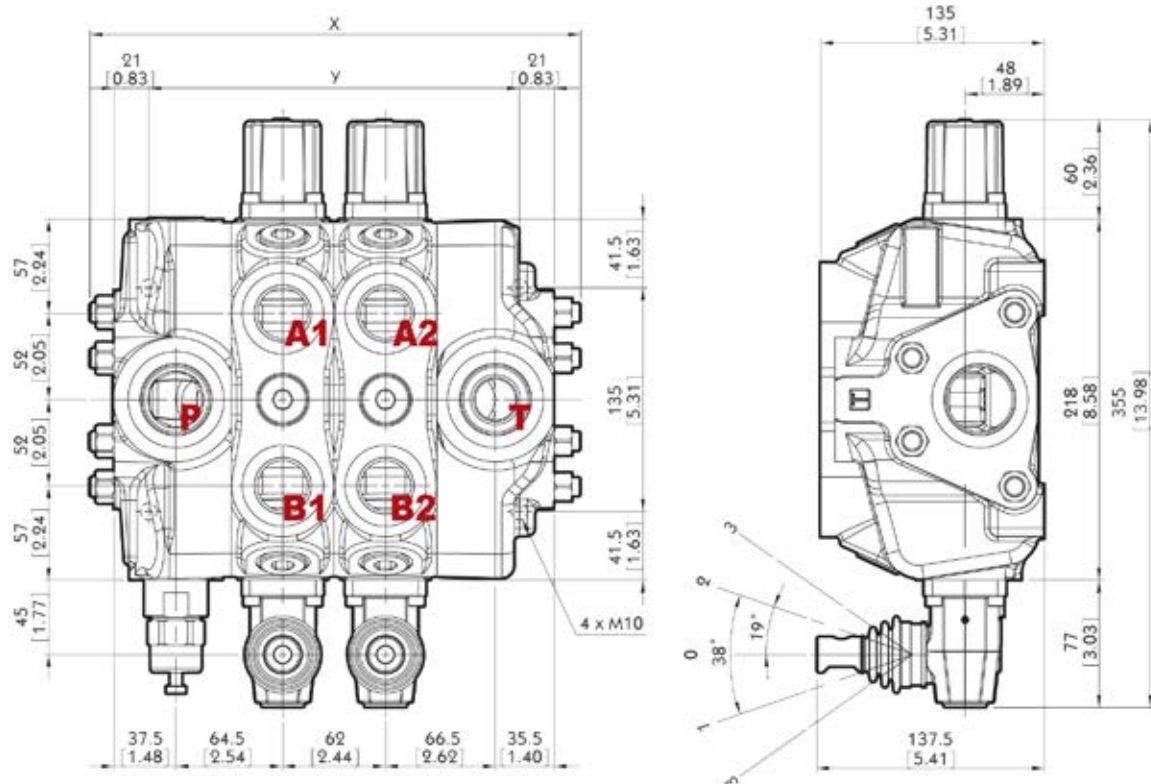
Relief valve standard
25-315 bar range
Standard setting 125 bar

Port cavities in all sections



SN8 Options

Part Number	List Price \$	Description
YLPSN83000	494.00	Relief valve 25-315 bar
YLWSN12200	31.00	Replacement lever M12 x 200mm
YLWSN82002	258.00	Motor spool (No.2)
YLWSN82003	288.00	Single acting spool on A port
YLWSN83061	129.00	Detent kit, no spring to centre (variations available)
YLWSN83091	273.00	Detent kit, spring to centre (variations available)
YLWSN83080	319.00	Pneumatic spool positioner
YLWSN830810	479.00	Hydraulic pilot kit - maximum pressure 50 bar (lever not included, see page 246)
YLWSN830811	479.00	Hydraulic pilot kit - SN8 - 28IMM, motor spool (lever not included, see page 246)
YLWSN84300-12V	546.00	Electro-pneumatic spool positioner, 12v DC
YLWSN84300-24V	546.00	Electro-pneumatic spool positioner, 24v DC
YLWSN84803	273.00	Microswitch kit, normally open (variations available)
YLWSN65002	201.00	Anti shock valve 63-125 bar
YLWSN65003	201.00	Anti shock valve 100-250 bar
YLWSN65004	201.00	Anti shock valve 200-315 bar
YLWSN85012	314.00	Anti shock & anti cavitation valve 63-125 bar
YLWSN85013	314.00	Anti shock & anti cavitation valve 100-250 bar
YLWSN85014	314.00	Anti shock & anti cavitation valve 200-315 bar
YLWSN65100	191.00	Anti cavitation valve



SECTIONAL VALVES

Remote Control Accessories

Cable Control

Part Number	List Price \$	Description
RCC-3/1S/HL	227.00	Remote lever for cable control SN3
RCC-5/1S/HL	258.00	Remote lever for cable control SN4,6,8
FCR-2	391.00	Joystick for cable control, dual axis
YLWSN45003	50.00	Cable connector, spool to joystick cable SN3
YLWSN44003	93.00	Cable connector, spool to joystick cable SN4
YLWSN64003	123.00	Cable connector, spool to joystick cable SN6
YLWSN84003	191.00	Cable connector, spool to joystick cable SN8
YLMBCABLE1M	170.00	Cable 1 Metre
YLMBCABLE1.5M	175.00	Cable 1.5 Metre
YLMBCABLE2M	185.00	Cable 2 Metre
YLMBCABLE2.5M	196.00	Cable 2.5 Metre
YLMBCABLE3M	206.00	Cable 3 Metre

FCR



RCC



JHP



Hydraulic Pilot Controllers

Part Number	List Price \$	Description	Axis	Flow	Inlet Pres. Range	A&B Outlet Pres. Range
JHP-1/1S-G2/8-A01B	386.00	Spring centre	Single	5-20 lpm	30-100 bar	5-19 bar
JHP-1/1S-G2/9-1-A01B	458.00	Spring centre friction detent				
JHP-1/1S-G2/FD-A01B	453.00	Friction detent				
JHP-1/1S-G2/LES-A01B	484.00	Safety lever detent in neutral				
JHP-2/01-G2/01-LCB-B02B	901.00	Spring centre	Dual			6-25 bar

Note: All hydraulic pilot controllers are suitable with sectional valves, proportional valves and monoblock valves (excluding MB2 series)

Pump Side Modules	248
Pilot Oil Supply Adaptors	248
Load Sense Solenoid Unloading Valves	248
Basic Modules	249
Levers	249
Spool Assembly	249
Side Options	250
Port Relief Shock & Suction Valves	250
Hydraulic Pilot Controllers	251
Electrical Controllers	251
Seal Kits	251
End Caps	251
Bolt Kits	251

PV4 PROPORTIONAL VALVES

Proportional Valves

Up to 230 lpm inlet flow
Up to 130 lpm spool flow
350 bar maximum pressure

For further product specs
or advice, please contact us



PV-4 Pump Side Modules

Part Number	List Price \$	Max Flow	Pump Type	Pilot Oil	Actuation	Unloader Valve Port	Shock Valve	
PV4P0101-G6	489.00	140 lpm	Fixed	No	Mechanical	No	No	
PV4P0201-G6	489.00		Variable					
PV4P0102-G6	561.00		Fixed	Yes	Electrical			
PV4P0202-G6	561.00		Variable					
PV4P0103-G6	561.00		Fixed	No	Mechanical	Yes		
PV4P0203-G6	561.00		Variable					
PV4P0104-G6	649.00		Fixed	Yes	Electrical			No
PV4P0204-G6	649.00		Variable					
PV4P0105-G6	639.00		Fixed					
PV4P0205-G6	639.00		Variable					
PV4P0106H-G6	608.00		Fixed		Hydraulic			
PV4P0206H-G6	608.00							
PV4P0301-G8	412.00	150 lpm	Variable	Yes	Electrical	No	No	
PV4P0302-G8	530.00						Yes	
PV4P0303-G8	489.00	230 lpm					Electrical	No
PV4P0304-G8	628.00							Yes

Pilot Oil Supply Adaptors

Part Number	List Price \$	Description
PV4-PCG	93.00	External pilot oil supply adaptor with check valve - for fixed displacement pumps
PV4-POG	46.00	External pilot oil supply adaptor - for fixed or variable displacement pumps

PV4 Load Sense Solenoid Unloading Valves

Part Number	List Price \$	Type	Manual Override	Voltage
PV4-ELNXX (12/24)	232.00	Normally open	No	12/24v DC
PV4-ELFXX (12/24)	273.00	Normally closed	No	12/24v DC
PV4-ELNMXX (12/24)	361.00	Normally open	Yes	12/24v DC

PV-4 Basic Modules

Part Number	List Price \$	A&B Shock-Suction Valve Ports	Load Drop Check Valve	Load Sense A&B Shuttle Valve	Non-damped Pressure Compensation	Damped Pressure Compensation	A&B Load Sense Relief Valves
PV4V01-G4	350.00						
PV4V01U-G4	391.00	YES					
PV4V02-G4	500.00		YES				
PV4V02U-G4	541.00	YES	YES				
PV4V03U-G4	670.00	YES		YES			
PV4V04-G4	659.00				YES		
PV4V04U-G4	690.00	YES			YES		
PV4V05-G4	670.00					YES	
PV4V05U-G4	690.00	YES				YES	
PV4V06-G4	984.00				YES		YES
PV4V06U-G4	1051.00	YES			YES		YES
PV4V07-G4	1071.00					YES	YES
PV4V07U-G4	1102.00	YES				YES	YES

* When using multiple spools concurrently, use pressure compensated module

PV-4 Levers

Part Number	List Price \$	Description
PV4-LM	129.00	Spring centering lever with stroke adjustment on A&B
2BMPV400661	49.00	Replacement handle

For further product specs or advice, please contact us

PV-4 Spool Assembly

Part Number	List Price \$	(X)	(XXX)	(XXXX)
YLWVPV420	180.00	(1) Cylinder spool (2) Motor spool (3) Single-acting on A (4) Single-acting on B	(005) 5 lpm spool (010) 10 lpm spool (025) 25 lpm spool (040) 40 lpm spool (065) 65 lpm spool (100) 100 lpm spool (130) 130 lpm spool	(AB) Use with A&B relief module (HA) Use with hydraulic actuation (ABHA) Use with A&B relief module & hydraulic actuation (FD) Use with friction detent (ABFD) Use with A&B relief module & friction detent <i>No suffix needed for all other types</i>

* Modules PV4V01/02/04/05 require basic spool plus either HA or FD as needed

* Modules PV4V03/06/07 require AB spools plus either HA or FD as needed

* FD spools must be used with pressure compensated modules PV04/05/06/07

Other flow & pressure control spools available on request

PV4 PROPORTIONAL VALVES

Proportional Valves

PV-4 B Side Options

Part Number	List Price \$	Description
PV4-CO	41.00	Standard cover for manual operation
PV4-FD	160.00	Friction detent
PV4-HAG2	108.00	Hydraulic actuation
EPVO-H0101	979.00	Electrical on-off 11-30v
EPVE-12D	731.00	Use with PWM voltage control signal 12v DC
EPVE-24D	731.00	Use with PWM voltage control signal 24v DC
EPVM-H0111	1514.00	Proportional coil standard 12v DC
EPVM-H0121	1514.00	Proportional coil standard 24v DC

* EPVE coils must be used with HA spool, cannot be used with EPVO/EPVM

* EPVO/EPVM can be used on same valve

PV-4B Port Relief Shock & Suction Valves

Part Number	List Price \$	Setting Pressure	
		bar	psi
PV4-U32	93.00	32	464
PV4-U50	93.00	50	725
PV4-U63	93.00	63	914
PV4-U80	93.00	80	1160
PV4-U100	93.00	100	1450
PV4-U125	93.00	125	1813
PV4-U140	93.00	140	2030
PV4-U150	93.00	150	2175
PV4-U160	93.00	160	2320
PV4-U175	93.00	175	2538
PV4-U190	93.00	190	2755
PV4-U210	93.00	210	3045
PV4-U230	93.00	230	3335
PV4-U240	93.00	240	3480
PV4-U250	93.00	250	3625
PV4-U265	93.00	265	2843
PV4-U280	93.00	280	4061
PV4-U300	93.00	300	4351
PV4-U320	93.00	320	4641
PV4-U350	93.00	350	5075
2BMPV400248	77.00	Suction only	
PV4-DST	31.00	Cavity plug	

PV-4 Hydraulic Pilot Controllers

Part Number	List Price \$	Description	Axis	Flow	Inlet Pres. Range	A&B Outlet Pres. Range
JHP-1/1S-G2/8-A01B	386.00	Spring centre	Single	5-20 lpm	30-100 bar	5-19 bar
JHP-1/1S-G2/9-1-A01B	458.00	Spring centre friction detent				
JHP-1/1S-G2/FD-A01B	453.00	Friction detent				
JHP-1/1S-G2/LES-A01B	484.00	Safety lever detent in neutral				
JHP-2/01-G2/01-LCB-B02B	901.00	Spring centre	Dual			6-25 bar

Note: All hydraulic pilot controllers are suitable with sectional valves, proportional valves and monoblock valves (excluding MB2 series)

PV-4 Electrical Controllers

Part Number	List Price \$	Description
PVH-1	783.00	11-30v DC voltage control 25-75%

PV-4 Seal Kits

Part Number	List Price \$	Description
PV4-SK-01	20.00	Seal Kit PV4 - Basic Section V01(U)
PV4-SK-02	22.00	Seal Kit PV4 - Basic Section V02(U) thru V07(U)
PV4-SK-03	24.00	Seal Kit PV4 - End Plate 101/102
PV4-SK-04	27.00	Seal Kit PV4 - End Plate 201/202
PV4-SK-05	29.00	Seal Kit PV4 - EPVM/EPVO
PV4-SK-06	31.00	Seal Kit PV4 - Friction Detent End Plate FD
PV4-SK-07	34.00	Seal Kit PV4 - Lever Kit LM 2BMPV400542
PV4-SK-08	36.00	Seal Kit PV4 - Inlet 101/103/201/203
PV4-SK-09	38.00	Seal Kit PV4 - Inlet 102/104/106/202/204/206
PV4-SK-10	40.00	Seal Kit PV4 - Inlet 105/205
PV4-SK-11	42.00	Seal Kit PV4 - End Cap CO 2BMPV400543

End Caps

Part Number	List Price \$	Material	Description
PV4C0101	93.00	Aluminium	End plate, 300 bar
PV4C0102	134.00		End plate, 300 bar, LS Port
PV4C0201	144.00	Cast Iron	End plate, 300 bar
PV4C0202	185.00		End plate, 300 bar, LS Port

Bolt Kits

Part Number	List Price \$	Part Number	List Price \$
PV4M-001	20.00	PV4M-006	31.00
PV4M-002	22.00	PV4M-007	34.00
PV4M-003	24.00	PV4M-008	36.00
PV4M-004	27.00	PV4M-009	38.00
PV4M-005	29.00	PV4M-010	40.00



AG Cylinders 1.5" Bore	254
AG Cylinders 2.0" Bore	255
AG Cylinders 2.5" Bore	256
AG Cylinders 3.0" Bore	257
AG Cylinders 3.5" Bore	258
AG Cylinders 4.0" Bore	259
AG Cylinders 5.0" Bore	260
AG Toplink Cylinders 2.5" Bore	261
Phasing Cylinders	262
Short Closed Length Cylinders	264
Special Length Cylinders	264
Landing Legs	265
Chute Jack Cylinders	265
Cylinder Attachments	266
Common Swivel Foot	267
Whoa Stop Cylinder Stroke Control Segments	267
Cylinder Pins, Plugs & Breathers	268
Cylinder Seal Kits	268



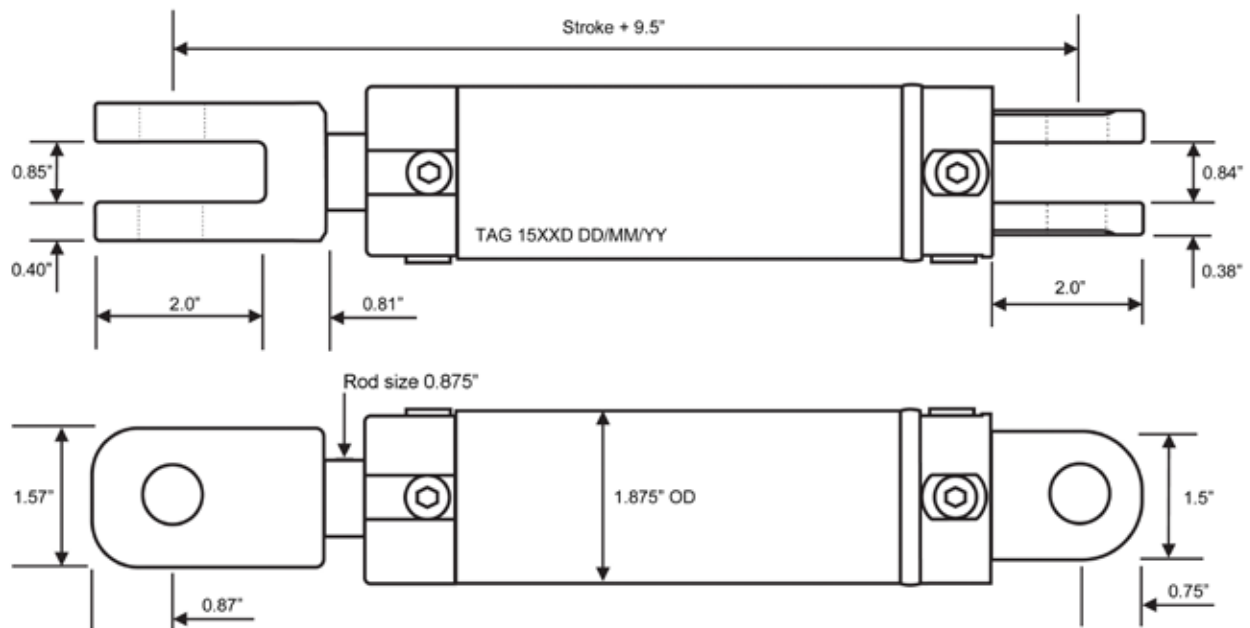
WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

HYDRAULIC CYLINDERS

AG Cylinders - 1.5" bore



Part Number	List Price \$	Stroke	Closed		Open		Description
			Inch	mm	Inch	mm	
TAG 1502D	438.00	2"	11.5"	292.1	13.5"	342.9	Maximum Pressure: 3500psi Ports: 9/16" UNO Pins: 3/4" pins
TAG 1504D	438.00	4"	13.5"	342.9	17.5"	444.5	
TAG 1506D	438.00	6"	15.5"	393.7	21.5"	546.1	
TAG 1508D	438.00	8"	17.5"	444.5	25.5"	647.7	
TAG 1510D	459.00	10"	19.5"	495.3	29.5"	749.3	
TAG 1512D	480.00	12"	21.5"	546.1	33.5"	850.9	
TAG 1514D	523.00	14"	23.5"	596.9	37.5"	952.5	
TAG 1516D	523.00	16"	25.5"	647.7	41.5"	1054.1	
TAG 1518D	544.00	18"	27.5"	698.5	45.5"	1155.7	
TAG 1520D	566.00	20"	29.5"	749.3	49.5"	1257.3	
TAG 1524D	609.00	24"	33.5"	850.9	57.5"	1460.5	
TAG 1530D	672.00	30"	39.5"	1003.3	69.5"	1765.3	
TAG 1536D	736.00	36"	45.5"	1155.7	81.5"	2070.1	
TAG 1548D	865.00	48"	57.5"	1460.5	105.5"	2679.7	

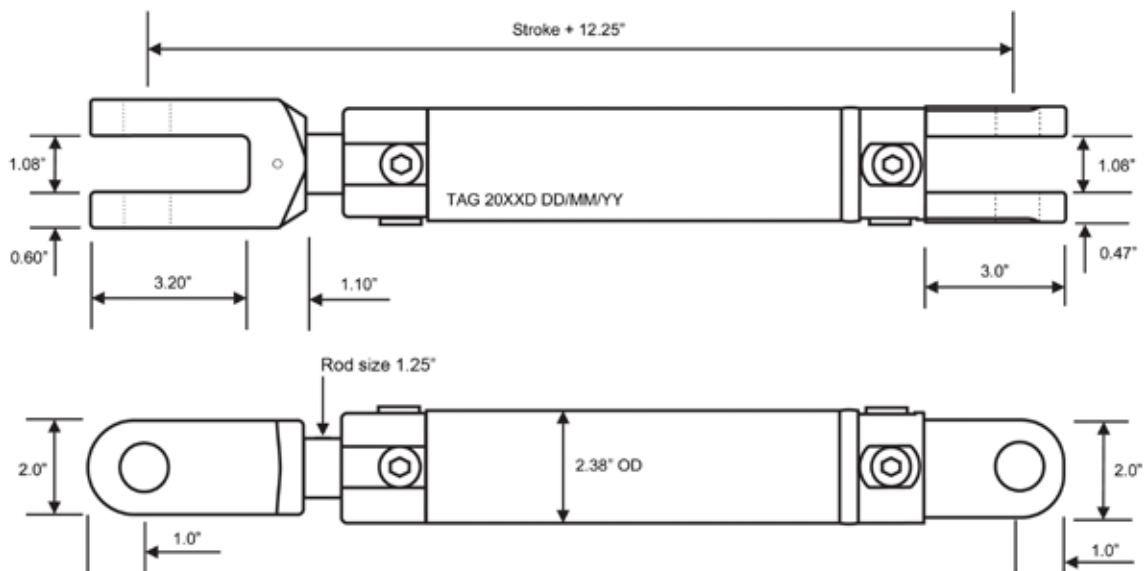


AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT



WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

Part Number	List Price \$	Stroke	Closed		Open		Description
			Inch	mm	Inch	mm	
TAG 2002D	413.00	2"	14.25"	361.95	16.25"	412.75	Maximum Pressure: 3500psi Ports: 9/16" UNO Pins: 1" pins
TAG 2004D	413.00	4"	16.25"	412.75	20.25"	514.35	
TAG 2006D	413.00	6"	18.25"	463.55	24.25"	615.95	
TAG 2008D	413.00	8"	20.25"	514.35	28.25"	717.55	
TAG 2010D	436.00	10"	22.25"	565.15	32.25"	819.15	
TAG 2012D	458.00	12"	24.25"	615.95	36.25"	920.75	
TAG 2014D	483.00	14"	26.25"	666.75	40.25"	1022.35	
TAG 2016D	506.00	16"	28.25"	717.55	44.25"	1123.95	
TAG 2018D	524.00	18"	30.25"	768.35	48.25"	1225.55	
TAG 2020D	559.00	20"	32.25"	819.15	52.25"	1327.15	
TAG 2022D	593.00	22"	34.25"	869.95	56.25"	1428.75	
TAG 2024D	595.00	24"	36.25"	920.75	60.25"	1530.35	
TAG 2026D	669.00	26"	38.25"	971.55	64.25"	1631.95	
TAG 2028D	676.00	28"	40.25"	1022.35	68.25"	1733.55	
TAG 2030D	679.00	30"	42.25"	1073.15	72.25"	1835.15	
TAG 2036D	732.00	36"	48.25"	1225.55	84.25"	2139.95	
TAG 2042D	893.00	42"	54.25"	1377.95	96.25"	2444.75	
TAG 2048D	893.00	48"	60.25"	1530.35	108.25"	2749.55	
TAG 2054D	1010.00	54"	66.25"	1682.75	120.25"	3054.35	



**AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT**



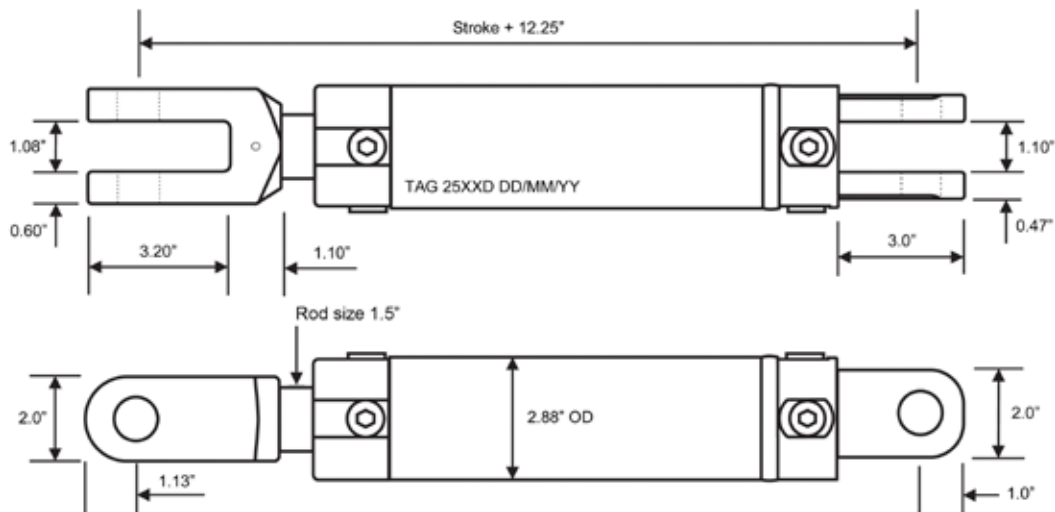
WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

HYDRAULIC CYLINDERS

AG Cylinders - 2.5" bore



Part Number	List Price \$	Stroke	Closed		Open		Description
			Inch	mm	Inch	mm	
TAG 2504D	416.00	4"	16.25"	412.75	20.25"	514.35	Maximum Pressure: 3500psi Ports: 3/4" UNO Pins: 1" pinsT
TAG 2506D	416.00	6"	18.25"	463.55	24.25"	615.95	
TAG 2508D	416.00	8"	20.25"	514.35	28.25"	714.55	
TAG 2510D	438.00	10"	22.25"	565.15	32.25"	819.15	
TAG 2512D	460.00	12"	24.25"	615.95	36.25"	920.75	
TAG 2514D	483.00	14"	26.25"	666.75	40.25"	1022.25	
TAG 2516D	506.00	16"	28.25"	717.55	44.25"	1123.25	
TAG 2518D	528.00	18"	30.25"	768.35	48.25"	1225.55	
TAG 2520D	562.00	20"	32.25"	819.15	52.25"	1327.15	
TAG 2522D	595.00	22"	34.25"	869.95	56.25"	1428.75	
TAG 2524D	595.00	24"	36.25"	920.75	60.25"	1530.35	
TAG 2526D	679.00	26"	38.25"	971.55	64.25"	1631.95	
TAG 2528D	679.00	28"	40.25"	1022.25	68.25"	1733.55	
TAG 2530D	679.00	30"	42.25"	1073.15	72.25"	1835.15	
TAG 2536D	735.00	36"	48.25"	1225.55	84.25"	2139.95	
TAG 2542D	895.00	42"	54.25"	1377.95	96.25"	2444.75	
TAG 2548D	895.00	48"	60.25"	1530.35	108.25"	2749.55	
TAG 25-1500D	989.00	1500mm	71.30"	1811.15	130.36"	3311.15	
TAG 25-2000D	2117.00	2000mm	90.98"	2311.1	169.73"	4311.15	
TAG 25-2500D	2293.00	2500mm	110.67"	2811.15	209.10"	5311.15	

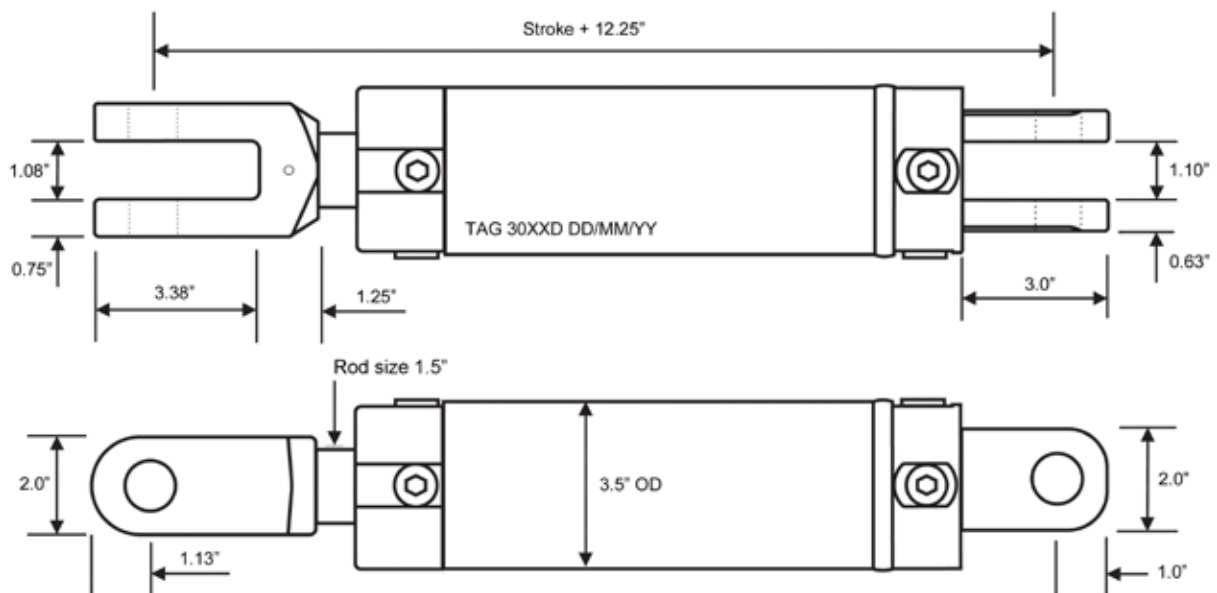


**AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT**



WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

Part Number	List Price \$	Stroke	Closed		Open		Description
			Inch	mm	Inch	mm	
TAG 3004D	485.00	4"	16.25"	412.75	20.25"	514.35	Maximum Pressure: 3500psi Ports: 3/4" UNO Pins: 1" pins
TAG 3006D	485.00	6"	18.25"	463.55	24.25"	615.95	
TAG 3008D	485.00	8"	20.25"	514.35	28.25"	714.55	
TAG 3010D	512.00	10"	22.25"	565.15	32.25"	819.15	
TAG 3012D	539.00	12"	24.25"	615.95	36.25"	920.75	
TAG 3014D	620.00	14"	26.25"	666.75	40.25"	1022.25	
TAG 3016D	620.00	16"	28.25"	717.55	44.25"	1123.25	
TAG 3018D	620.00	18"	30.25"	768.35	48.25"	1225.55	
TAG 3020D	698.00	20"	32.25"	819.15	52.25"	1327.15	
TAG 3022D	698.00	22"	34.25"	869.95	56.25"	1428.75	
TAG 3024D	698.00	24"	36.25"	920.75	60.25"	1530.35	
TAG 3026D	778.00	26"	38.25"	971.55	64.25"	1631.95	
TAG 3028D	778.00	28"	40.25"	1022.35	68.25"	1733.55	
TAG 3030D	778.00	30"	42.25"	1073.15	72.25"	1835.15	
TAG 3036D	859.00	36"	48.25"	1225.55	84.25"	2139.95	
TAG 3042D	1019.00	42"	54.25"	1377.95	96.25"	2444.75	
TAG 3048D	1019.00	48"	60.25"	1530.35	108.25"	2749.55	



**AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT**



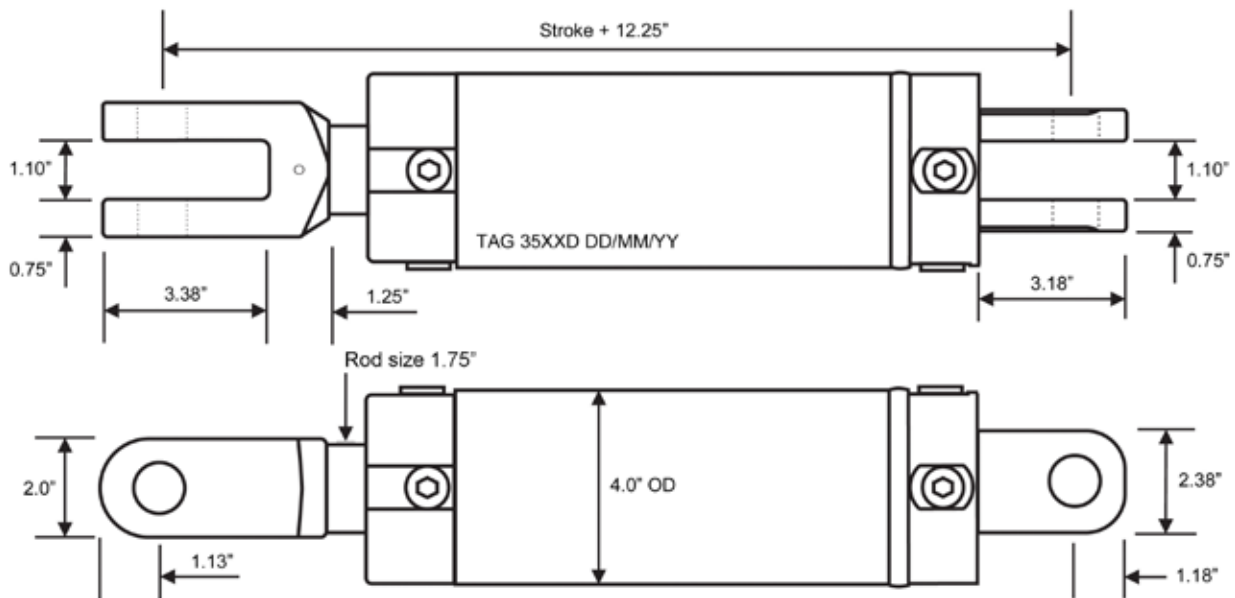
WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

HYDRAULIC CYLINDERS

AG Cylinders - 3.5" bore



Part Number	List Price \$	Stroke	Closed		Open		Description
			Inch	mm	Inch	mm	
TAG 3506D	625.00	6"	18.25"	463.55	24.25"	615.95	Maximum Pressure: 3500psi Ports: 3/4" UNO Pins: 1" pins
TAG 3508D	625.00	8"	20.25"	514.35	28.25"	714.55	
TAG 3510D	666.00	10"	22.25"	565.15	32.25"	819.15	
TAG 3512D	708.00	12"	24.25"	615.95	36.25"	920.75	
TAG 3514D	749.00	14"	26.25"	666.75	40.25"	1022.25	
TAG 3516D	790.00	16"	28.25"	717.55	44.25"	1123.25	
TAG 3518D	832.00	18"	30.25"	768.35	48.25"	1225.55	
TAG 3520D	873.00	20"	32.25"	819.15	52.25"	1327.15	
TAG 3524D	956.00	24"	36.25"	920.75	60.25"	1530.35	
TAG 3530D	1079.00	30"	42.25"	1073.15	72.25"	1835.15	
TAG 3536D	1203.00	36"	48.25"	1225.55	84.25"	2139.95	
TAG 3542D	1446.00	42"	54.25"	1377.95	96.25"	2444.75	
TAG 3548D	1446.00	48"	60.25"	1530.35	108.25"	2749.55	

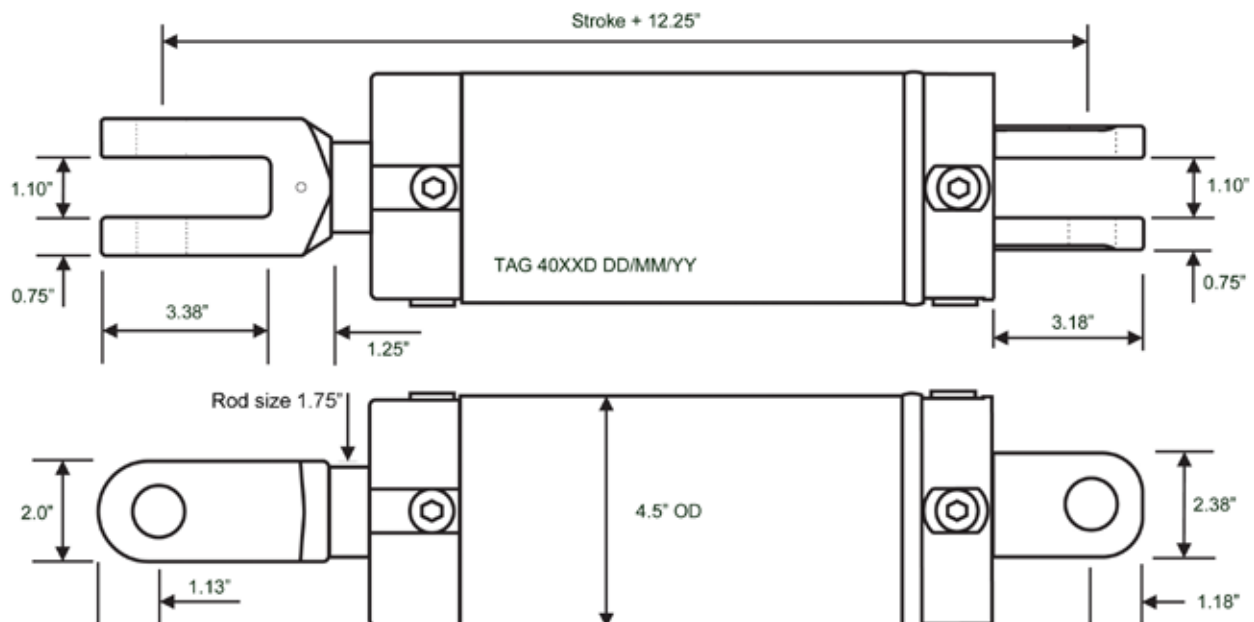


**AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT**



WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

Part Number	List Price \$	Stroke	Rod	Closed		Open		Description
				Inch	mm	Inch	mm	
TAG 4004D	736.00	4"	1.75"	16.25"	412.75	20.25"	514.35	Maximum Pressure: 3500psi Ports: 3/4" UNO Pins: 1" pins
TAG 4006D	736.00	6"		18.25"	463.55	24.25"	615.95	
TAG 4008D	736.00	8"		20.25"	514.35	28.25"	717.55	
TAG 4012D	834.00	12"		24.25"	615.95	36.25"	920.75	
TAG 4016D	930.00	16"		28.25"	717.55	44.25"	1123.95	
TAG 4018D	980.00	18"		30.25"	768.35	48.25"	1225.55	
TAG 4020D	1029.00	20"		32.25"	819.15	52.25"	1327.15	
TAG 4024D	1126.00	24"		36.25"	920.75	60.25"	1530.35	
TAG 4030D	1272.00	30"		42.25"	1073.15	72.25"	1835.15	
TAG 4036D	1420.00	36"		48.25"	1225.55	84.25"	2139.95	
TAG 4042D	1562.00	42"		54.25"	1377.95	96.25"	2444.75	
TAG 4048D	1705.00	48"		60.25"	1530.35	108.25"	2749.55	
TAG 4012D-200	919.00	12"	2"	24.25"	615.95	36.25"	920.75	
TAG 4016D-200	950.00	16"		28.25"	717.55	44.25"	1123.95	
TAG 4018D-200	1082.00	18"		30.25"	768.35	48.25"	1225.55	
TAG 4024D-200	1239.00	24"		36.25"	920.75	60.25"	1530.35	



AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT



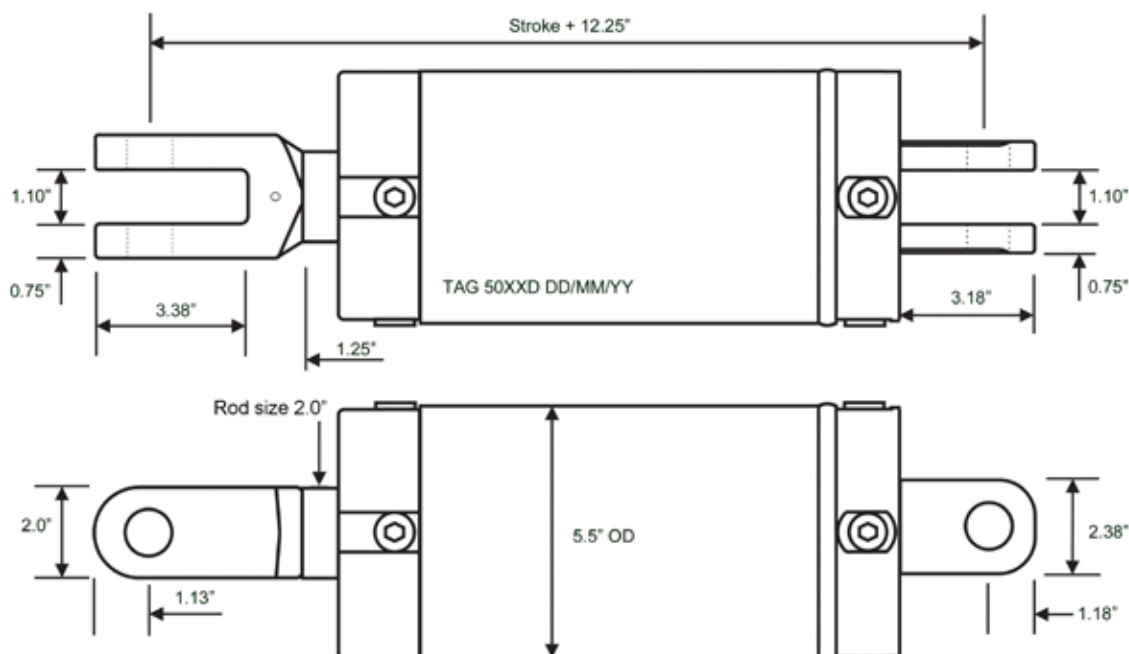
WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

HYDRAULIC CYLINDERS

AG Cylinders - 5.0" bore



Part Number	List Price \$	Stroke	Closed		Open		Description
			Inch	mm	Inch	mm	
TAG 5008D	956.00	8"	20.25"	514.35	28.25"	717.55	Maximum Pressure: 3500psi Ports: 3/4" UNO Pins: 1" pins
TAG 5012D	1062.00	12"	24.25"	615.95	36.25"	920.75	
TAG 5016D	1160.00	16"	28.25"	717.55	44.25"	1123.95	
TAG 5018D	1211.00	18"	30.25"	768.35	48.25"	1225.55	
TAG5020D	1290.00	20"	32.25"	819.15	52.25"	1327.15	
TAG 5024D	1377.00	24"	36.25"	920.75	60.25"	1530.35	
TAG 5030D	1473.00	30"	42.25"	1073.15	72.25"	1835.15	
TAG 5036D	1642.00	36"	48.25"	1225.55	84.25"	2139.95	
TAG 5048D	1913.00	48"	60.25"	1530.35	108.25"	2749.55	



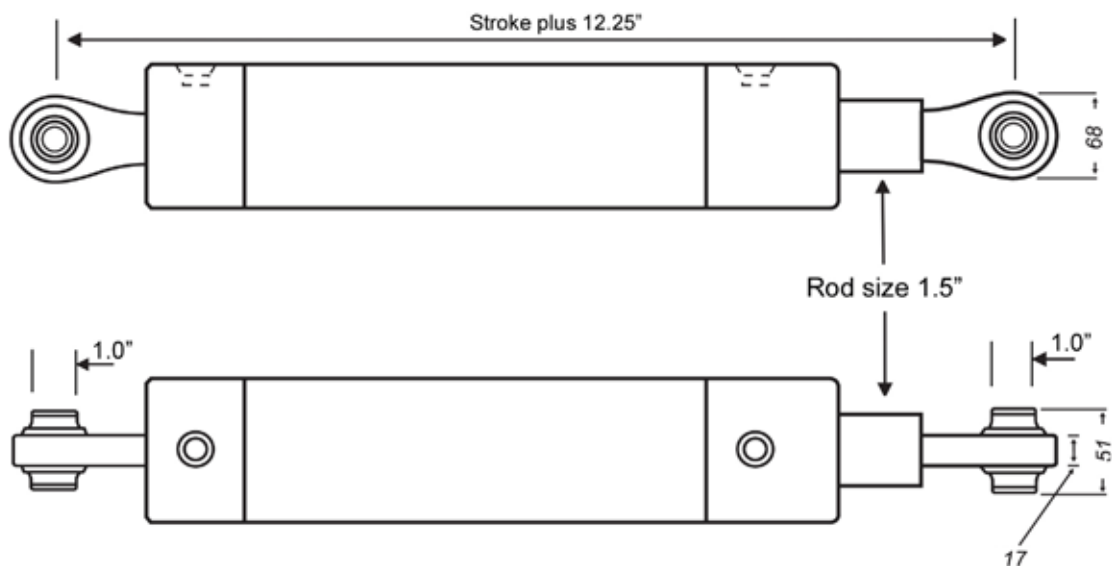
AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT



WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

AG Toplink Cylinders - 2.5" bore

Part Number	List Price \$	Stroke	Closed		Open		Description
			Inch	mm	Inch	mm	
TAG 2504DT2	485.00	4"	16.25"	412.75	20.25"	514.35	Maximum Pressure: 3500psi Ports: 3/4" UNO Pins: 1" pins
TAG 2506DT2	485.00	6"	18.25"	463.55	24.25"	615.95	
TAG 2508DT2	485.00	8"	20.25"	514.35	28.25"	717.55	
TAG 2510DT2	506.00	10"	22.25"	565.15	32.25"	819.15	
TAG 2512DT2	527.00	12"	24.25"	615.95	36.25"	920.75	



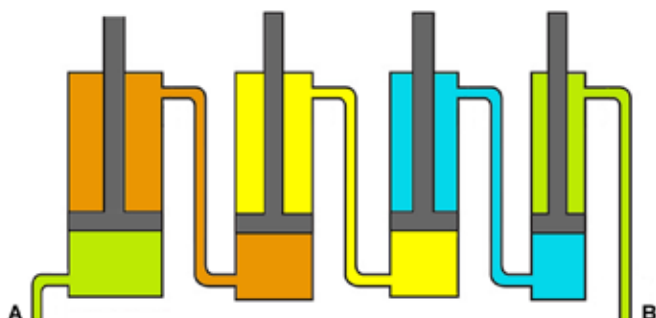
**AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT**



WARNING: Hydraulic cylinders without a hose burst valve, pilot operated check valve or counter balance valve directly mounted to the cylinder will not meet Australian Standard AS1418.8, nor occupational health & safety rules.

HYDRAULIC CYLINDERS

Phasing Cylinders



Hydraulic Phasing Cylinders - 8" stroke

Part Number	List Price \$	Bore	Stroke	Rod Diameter	Closed		Open	
					Inch	mm	Inch	mm
TVP300008125	709.00	3.00"	8"	1.25"	20.25"	514.35	28.25"	717.55
TVP325008125	814.00	3.25"						
TVP350008125	856.00	3.50"						
TVP3750081375	929.00	3.75"		1.375"				
TVP4000081375	908.00	4.00"						
TVP4250081375	1003.00	4.25"						
TVP450008150	1082.00	4.50"		1.50"				
TVP475008150	1244.00	4.75"						
TVP500008150	1302.00	5.00"						

Hydraulic Phasing Cylinders - 12" stroke

Part Number	List Price \$	Bore	Stroke	Rod Diameter	Closed		Open	
					Inch	mm	Inch	mm
TVP300012125	782.00	3.00"	12"	1.25"	24.25"	615.95	36.25"	920.75
TVP325012125	882.00	3.25"						
TVP350012125	914.00	3.50"						
TVP3750121375	1003.00	3.75"		1.375"				
TVP4000121375	987.00	4.00"						
TVP4250121375	1160.00	4.25"						
TVP450012150	1239.00	4.50"		1.50"				
TVP475012150	1428.00	4.75"						
TVP500012150	1554.00	5.00"						

AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT

Hydraulic Phasing Cylinders - 16" stroke

Part Number	List Price \$	Bore	Stroke	Rod Diameter	Closed		Open	
					Inch	mm	Inch	mm
TVP300016125	830.00	3.00"	16"	1.25"	28.25"	717.55	44.25"	1123.95
TVP325016125	961.00	3.25"						
TVP350016125	1003.00	3.50"						
TVP3750161375	1087.00	3.75"		1.375"				
TVP4000161375	1082.00	4.00"						
TVP4250161375	1176.00	4.25"						
TVP450016150	1271.00	4.50"		1.50"				
TVP475016150	1481.00	4.75"						
TVP500016150	1575.00	5.00"						

Hydraulic Phasing Cylinders - 18" stroke

Part Number	List Price \$	Bore	Stroke	Rod Diameter	Closed		Open	
					Inch	mm	Inch	mm
TVP300018125	835.00	3.00"	18"	1.25"	30.25"	768.35	48.25"	1225.55
TVP325018125	961.00	3.25"						
TVP350018125	1024.00	3.50"						
TVP3750181375	1118.00	3.75"		1.375"				
TVP4000181375	1092.00	4.00"						
TVP4250181375	1239.00	4.25"						
TVP450018150	1286.00	4.50"		1.50"				
TVP475018150	1502.00	4.75"						
TVP500018150	1596.00	5.00"						

Hydraulic Phasing Cylinders - 24" stroke

Part Number	List Price \$	Bore	Stroke	Rod Diameter	Closed		Open	
					Inch	mm	Inch	mm
TVP300024125	877.00	3.00"	24"	1.25"	36.25"	920.75	60.25	1530.35
TVP325024125	1076.00	3.25"						
TVP350024125	1181.00	3.50"						
TVP3750241375	1260.00	3.75"		1.375"				
TVP4000241375	1208.00	4.00"						
TVP4250241375	1428.00	4.25"						
TVP450024150	1544.00	4.50"		1.50"				
TVP475024150	1796.00	4.75"						
TVP500024150	2037.00	5.00"						

AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT

Hydraulic Phasing Cylinders - 36" stroke

Part Number	List Price \$	Bore	Stroke	Rod Diameter	Closed		Open	
					Inch	mm	Inch	mm
TVP300036125	1349.00	3.00"	36"	1.25"	48.25"	1225.55	84.25	2139.95
TVP325036125	1685.00	3.25"						
TVP350036125	1691.00	3.50"						
TVP3750361375	1922.00	3.75"		1.375"				
TVP4000361375	1869.00	4.00"						
TVP4250361375	2158.00	4.25"						
TVP450036150	2163.00	4.50"		1.50"				
TVP475036150	2263.00	4.75"						
TVP500036150	2263.00	5.00"						

AUSTRALIAN MADE / 2 YEAR WARRANTY
DATED SERIAL NUMBER / DUAL PORT

2" Short Closed Length Cylinders

Part Number	List Price \$	Stroke	Closed		Open		Description
			Inch	mm	Inch	mm	
TAG 2004DSHCC	468.00	4"	13.5"	342.9	17.5"	444.5	Maximum Pressure: 3500psi Ports: 9/16" Pins: 3/4" Rod: 1"
TAG 2006DSHCC	468.00	6"	15.5"	393.7	21.5"	546.1	
TAG 2008DSHCC	468.00	8"	17.5"	444.5	25.5"	647.7	
TAG 2012DSHCC	515.00	12"	21.5"	546.1	33.5"	850.9	
TAG 2016DSHCC	562.00	16"	25.5"	647.7	41.5"	1054.1	

Special Length Cylinders

Part Number	List Price \$	Stroke	Closed Centre mm	Open Centre	Max Pressure	Ports/Pins	Rod
TAG 25-1500D	1108.00	1500	1811.15	3311.15	3250psi	3/4" ports	1.1/2"
TAG 25-2000D	2117.00	2000	2311.15	4311.15			
TAG 25-2500D	2293.00	2500	2811.15	5311.15			
TAG 25-3000D	2494.00	3000	3311.15	6311.15			
TAG 30-1800D-200	2117.00	1800	2111.15	3911.15		1" pins	2"
TAG 30-1900D-200	2293.00	1900	2211.15	4111.15			
TAG 35-2000D	2293.00	2000	2311.15	4311.15			

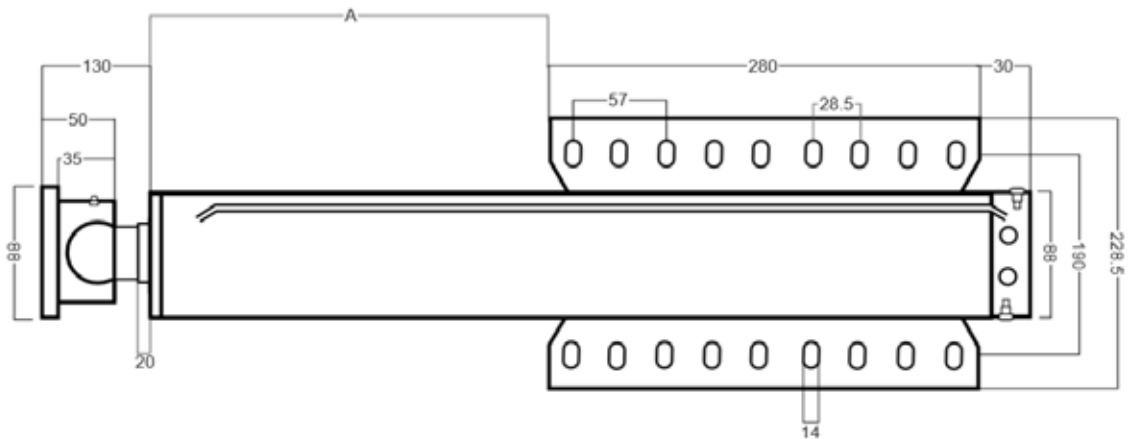


Landing Legs

Part Number	List Price \$	Rod	Bore	A	Stroke	Max Pressure	Ports
TF301620LEG	1386.00	2"	3"	245mm	16"	3500psi	9/16" UNO
TF302020LEG	1848.00			346mm	20"		
TF302420LEG	1869.00			480mm	24"		



**AUSTRALIAN MADE / 2 YEAR WARRANTY
DUAL PILOT CHECK VALVES INCORPORATED**



Concrete Truck Chute Jack Cylinders with Check Valve

Part Number	List Price \$	Stroke	Closed Centre	Open Centre	Max Pressure	Ports/Pins	Rod
TCB 30300	695.00	300mm	564mm	864mm	3250psi	9/16" ports 16mm eyes	1.1/4"

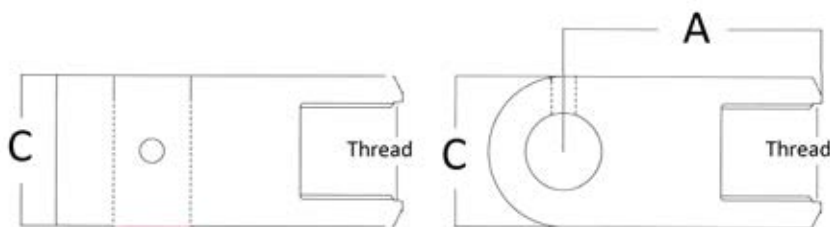


Cylinder Attachments

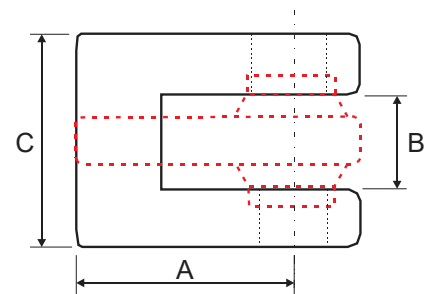
Part Number	List Price \$	Type	Thread	Pin Size	Material	Dimensions (mm)		
						A	B	C
CL075	125.00	Female Clevis	3/4" UNF	0.75"	Steel	51	21	43
CL100S (short)	147.00		1.1/4" UNF	1.0"	SG Iron	60	28.6	66
CL100	147.00				Steel	88		27.5
CL100STEEL	165.00						28.6	66
CL125STEEL	248.00			1.25"			29	64
CL150	201.00			1.5" *			n/a	63.5
CLM075	164.00	Block End	3/4" UNF	0.75"	Steel	51	n/a	40
CLM100	192.00		1.1/4" UNF	1.0"		87		50
B310	89.00	Ball End	Weld on	0.75"		58		n/a
B311	89.00			1.0"		51		

* Reduction bushes to 1" are supplied with CL150 (can also be bushed to other sizes). Grease port included.

Block End



Female Clevis



CL075



CL100



CL100S



CL100STEEL



CL125



CL150



B310



B311

Common Swivel Foot

Part Number	List Price \$	Description
FOOTMTFEMALE50	289.00	Fits any of our hydraulic cylinders (1.1/4" UNF thread)



Whoa-Stop Cylinder Stroke Control Segments (Made in USA)

Part Number	List Price \$	For Shaft Sizes	Set Contains Sizes
WA1090	121.00	1.128" > 1.500"	0.875" - 1.000" - 1.250" - 1.500"
WA1087	221.00	1.750" > 2.000"	1.000" - 1.500" - 2.000" - 2.250"



Other cylinder components also stocked (glands, pistons, endcaps) - contact us for info

HYDRAULIC CYLINDERS

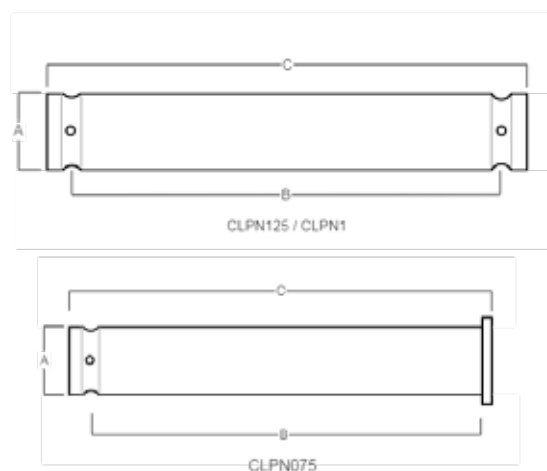
Cylinder Parts

Cylinder Pins

Part Number	List Price \$	Dimensions		
		A	B	C
CLPN075-46.5	43.00	3/4"	46.5mm	57.5mm
CLPN1-69	39.00	1"	69mm	81.5mm
CLPN1-60	39.00		60mm	72mm
CLPN1-76	39.00		76mm	90mm
CLPN125-87	57.00	1.1/4"	76mm	96mm

Pin Selection Guide

Cylinder Size	Size	Clevis Pin	Base End Pin
TAG 15	3/4"	CLPN075-46.5	CLPN075-46.5
TAG 20 SHORT CC			CLPN075-46.5
TAG 20	1"	CLPN1-69	CLPN1-60
TAG 25			CLPN1-60
TAG 30		CLPN1-76	CLPN1-69
TAG 35			CLPN1-76
TAG 40			CLPN1-76
TAG 50			CLPN1-76



Plugs & Breathers

Part Number	List Price \$	Description
A9431	35.00	Cylinder breather - brass cloth mesh filter - aluminium - 9/16-18 UNO thread
16329A	39.00	Cylinder breather - brass cloth mesh filter - aluminium - 3/4-16 UNO thread
DT-SAE6	4.00	9/16" UNO plug - hex key - low profile
DT-SAE8	5.00	3/4" UNO plug - hex key - low profile



Seal Kits

Part Number	List Price \$	Cylinder Type	Bore Size	Shaft Size
SK15087CAT	113.00	TAG Cylinder	1.5"	0.875"
SK20125CAT	125.00		2.0"	1.25"
SK2515CAT	125.00		2.5"	1.5"
SK3015CAT	135.00		3.0"	
SK35175CAT	137.00		3.5"	1.75"
SK40175CAT	153.00		4.0"	
SK5020CAT	206.00		5.0"	2.0"

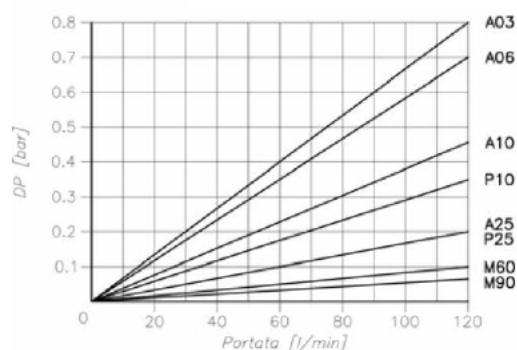
Spin On Filters 4"		270
Spin On Filters 5"		271
Medium Pressure Spin On Filters		272
Filter Heads		273
Gauges		274
Indicators		274
Oil Filtration Cart		275
Oil Transfer Unit		275
Tank Top Return Filters - TIFP Series		276
Tank Top Return Filters - FIF Series		277
Tank Top Return Filters - CFR Series		278
Pressure Filters - FSD Series		279
Pressure Filters - FHP Series		280
Pressure Filters - FMP Series		284
Pressure Filters - FMM Series		286

PREMIUM ITALIAN PRODUCT 

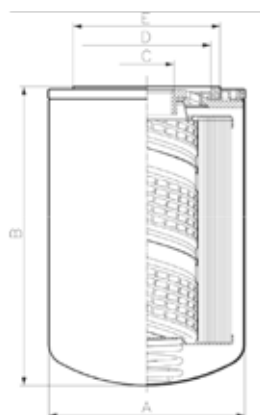
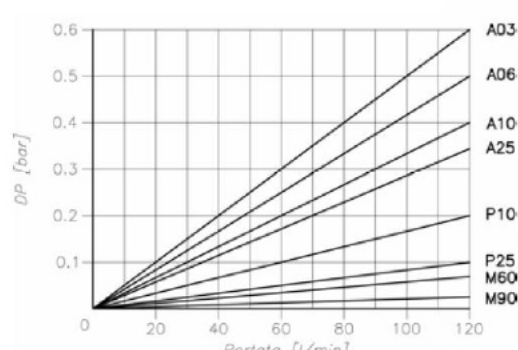
Spin On Filters 4"

Part Number	List Price \$	Micron	Can Thread (C)	Rec Max Flow	A	B	D	E
						mm		
CS05000P10A	40.00	10µm	3/4" BSPP	35 lpm	96	148	62.5	71.5
CS05000P25A	40.00	25µm		100 lpm				
CS05000M90A	93.00	90µm mesh		30 lpm				
CS05000A03A	124.00	3µm		120 lpm				
CS05000A06A	124.00	6µm						
CS07000P10A	57.00	10µm						
CS07000P25A	57.00	25µm		40 lpm				
CS07000M90A	170.00	90µm mesh						
CS07000A03A	180.00	3µm						
CS07000A06A	191.00	6µm						

CS050



CS070



PRESSURE DROP

Curves are calculated in accordance with ISO 3968 and are valid for clean filtering elements.

ΔP changes along with the density in presence of an eddy flow, and along with the dynamic viscosity in presence of a laminar flux. Curves are valid for mineral oils with a density of 0.86 kg/dm³ and a dynamic viscosity of 30mm²/sec (cSt).

When choosing the filtering medium, consider the pressure losses deriving from the flow rate:

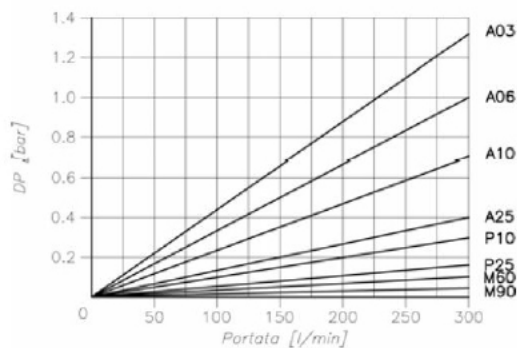
- * Between **0.05 & 0.1 bar** for suction line
- * Up to **0.3 ÷ 0.5 bar** for filters fitted on return line

(The total pressure drop is to be calculated by adding up the spin-on filter pressure drop).

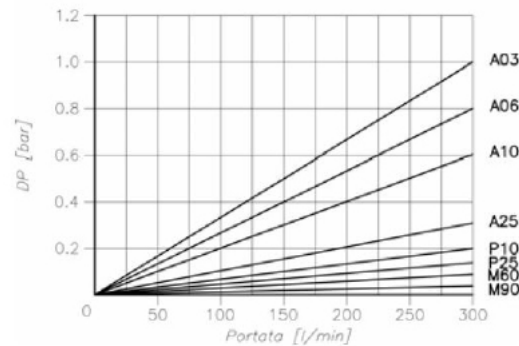
Spin On Filters 5"

Part Number	List Price \$	Micron	Can Thread (C)	Rec Max Flow	A	B	D	E
CS10000P10A	70.00	10µm	1.1/4" BSPP	200 lpm	126	180	96.5	107
CSG10060P10A	82.00	10µm	1.1/2" UNF	200 lpm			120	130
CS10000P25A	70.00	25µm	1.1/4" BSPP	300 lpm			96.5	107
CSG10060P25A	78.00	25µm	1.1/2" UNF	300 lpm			120	130
CS10000M90A	170.00	90µm mesh	1.1/4" BSPP	60 lpm	226	226	96.5	107
CS10000A03A	216.00	3µm		60 lpm				
CS10000A06A	216.00	6µm		60 lpm				
CS15000P10A	102.00	10µm		300 lpm				
CS15000P25A	102.00	25µm		300 lpm				
CS15000M90A	206.00	90µm mesh		75 lpm				
CS15000A03A	288.00	3µm		75 lpm				
CS15000A06A	288.00	6µm		75 lpm				

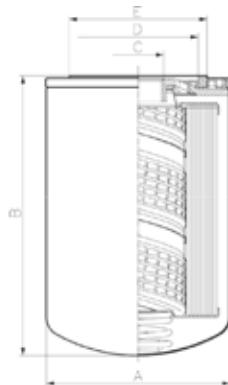
CS100



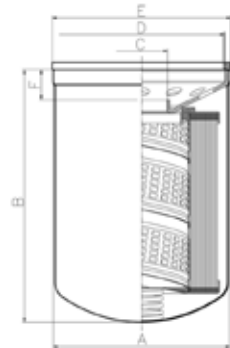
CS150



CS



CSG



PRESSURE DROP

Curved are calculated in accordance with ISO 3968 and are valid for clean filtering elements.

ΔP changes along with the density in presence of an eddy flow, and along with the dynamic viscosity in presence of a laminar flux. Curves are valid for mineral oils with a density of 0.86 kg/dm³ and a dynamic viscosity of 30mm²/sec (cSt).

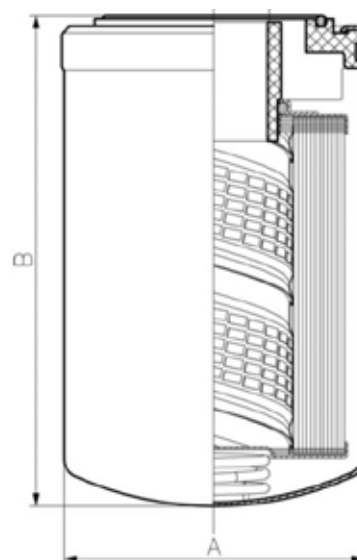
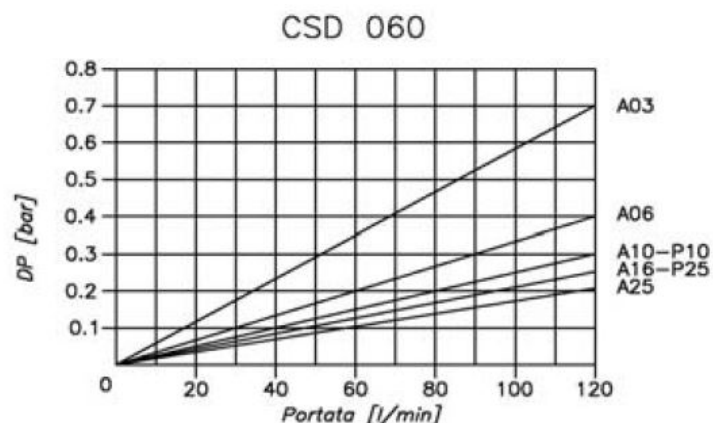
When choosing the filtering medium, consider the pressure losses deriving from the flow rate:

- * Between **0.05 & 0.1 bar** for suction line
- * Up to **0.3 ÷ 0.5 bar** for filters fitted on return line

(The total pressure drop is to be calculated by adding up the spin-on filter pressure drop).

Medium Pressure Spin On Filters

Part Number	List Price \$	Micron	Pressure Rating	Can Thread	Rec Max Flow	A mm	B mm
CSD06000A06A	170.00	6µm	35 bar	1.3/8"-12 UN	60 lpm	95.6	180
CSD06000P10A	98.00	10µm			80 lpm		
CSD06000P25A	98.00	25µm			95 lpm		



PRESSURE DROP

Curves are calculated in accordance with ISO 3968 and are valid for clean filtering elements.

ΔP changes along with the density in presence of an eddy flow, and along with the dynamic viscosity in presence of a laminar flux. Curves are valid for mineral oils with a density of 0.86 kg/dm³ and a dynamic viscosity of 30mm²/sec (cSt).

When choosing the filtering medium, consider the pressure losses deriving from the flow rate:

* Up to **0.3 ÷ 0.5 bar** for filters fitted on the return line

* Up to **1 ÷ 1.5 bar** for filters fitted on the pressure line

(The total pressure drop is to be calculated by adding up the spin-on filter pressure drop).

Filter Heads

Part Number	List Price \$	Filter Series	Ports	Bypass	Gauge Port
FCS050RAG1TR	43.00	CS050/070	3/4" BSPP	25 psi	1/8" BSPT
FCS050SAG1TS	43.00			5 psi	
FCS100RAG1TR	78.00	CS100/150	1.1/4" BSPP	25 psi	
FCS100SAG1TS	78.00			5 psi	



FCS050



FCS100

Filter Heads - Dual

Part Number	List Price \$	Filter Series	Ports	Bypass	Gauge Port
FCS200RAG1TR	162.00	CS100/150	1.1/2" BSPP	25 psi	1/8" BSPT
FCS200SAG1TS	162.00			5 psi	
FCS300RAG1TR	401.00			25 psi	
FCS300SAG1TS	401.00			5 psi	

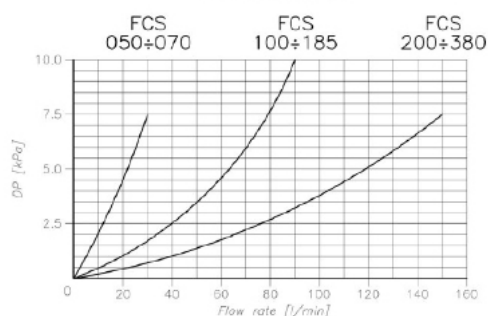


FCS200

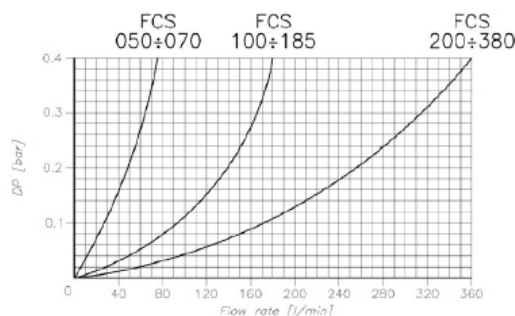


FCS300

SUCTION LINES



RETURN LINES


PRESSURE DROP

Curved are calculated in accordance with ISO 3968 and are valid for clean filtering elements.

△P changes along with the density in presence of an eddy flow, and along with the dynamic viscosity in presence of a laminar flux. Curves are valid for mineral oils with a density of 0.86 kg/dm³ and a dynamic viscosity of 30mm²/sec (cSt).

When choosing the filtering medium, consider the pressure losses deriving from the flow rate:

- * Between **0.05 & 0.1 bar** for suction line
- * Up to **0.3 ÷ 0.5 bar** for filters fitted on return line

(The total pressure drop is to be calculated by adding up the spin-on filter pressure drop).

Gauges

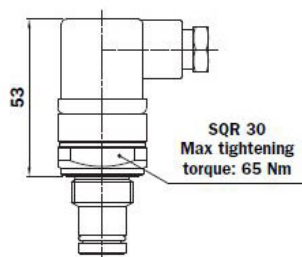
Part Number	List Price \$	Type	Range	Thread
114-01-211-V-000Z-SK	39.00	Visual	Suction	1/8" BSPT
114-01-211-002.8J-SK	39.00		Return	
ES	176.00	Electrical	Suction	
ER	137.00		Return	



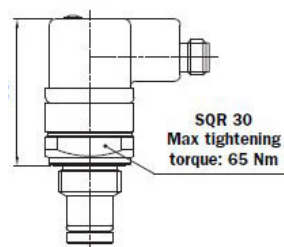
Indicators

Part Number	List Price \$	Thread	Pressure	Indicator	Connector
DEA50HA50P01	314.00	1/2" BSPP	5 bar	Electrical indicator	DIN
DLA50HA71P01	458.00			LED visual indicator	5 pin round
DLA50HA51P01	458.00				DIN

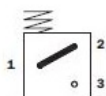
DEA



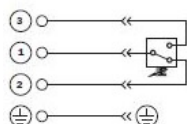
DLA



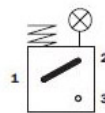
HYDRAULIC SYMBOL



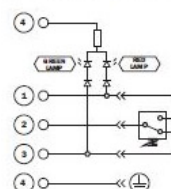
ELECTRICAL SYMBOL



HYDRAULIC SYMBOL



ELECTRICAL SYMBOL



Filtration Cart

Part Number	List Price \$	Description	
HNC11/20/M90/10	3605.00	Inlet filter	90µm nominal - 5psi bypass
		Outlet filter	10µm nominal - 25psi bypass
		Electric motor	1.1kw 1440rpm with on/off switch
		Gear pump	Vivoil 16.8cc Group 2
		Output flow	24 lpm
		Inlet hose	1.1/4" diameter, 2.2mtr length
		Outlet hose	1" diameter, 2.2mtr length
		Visual clogging gauges fitted on both inlet and outlet filters	
ICMWMKUG12.0	11917.00	Optional: ICM2.0 In-line Contamination Monitor	
Replacement filters: see page 271 (Inlet filter: CS15000M90A Outlet filter: CS15000P10A)			



Filtration cart configuration has been based on usage with 46 grade hydraulic oil at minimum ambient temperature of 20°C. Operation outside these parameters could result in filtration system bypass. For special applications please contact us for custom configuration options.

Transfer Unit

Part Number	List Price \$	Description
PTU55/6	1442.00	Transfer Unit (no filtration)
		0.55kw 4-pole single phase electric motor
		5.9cc Vivoil Pump
		35 bar
		Overload protection
		Short lead 10 amp plug
		2 mtr hoses Stock version 20kg

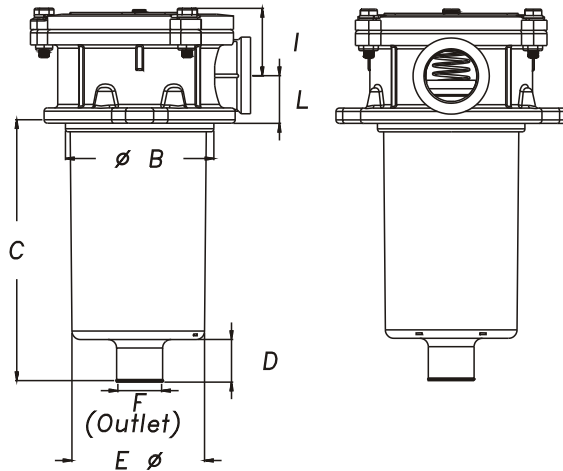


FILTRATION

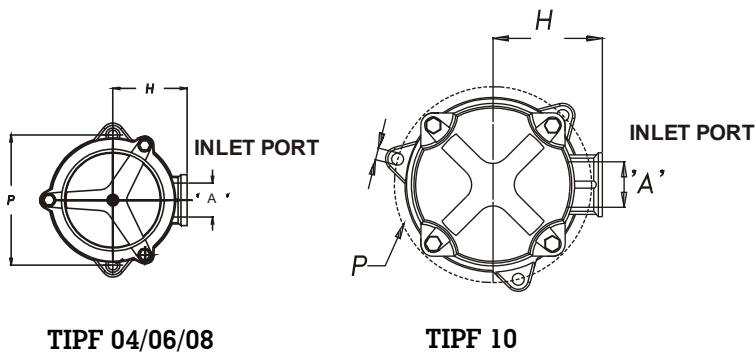
Tank Top Return Filters - TIFP Series

Part Number	List Price \$	Port Size (A)	Micron	Max Flow Rate	Bypass
TIFP-04B-P10-R4	75.00	1/2" BSPP	10 µm Nominal	25 lpm	25 psi
TIFP-06B-P10-R4	104.00	3/4" BSPP		40 lpm	
TIFP-08B-P10-R4	109.00	1" BSPP		50 lpm	
TIFP-10B-P10-R4	258.00	1.1/4" BSPP		100 lpm	

Dimensions (mm)

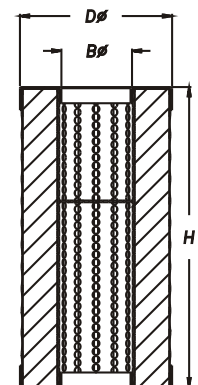


	TIFP-04	TIFP-06	TIFP-08	TIFP-10
B	68	87	87	129
C	89	104	153	278
D	15	25	25	40
E	58	78	78	110
F	19	22	22	39
H	53	65	65	97
I	27	36	36	47
L	24	28	28	37
P	90	115	115	175



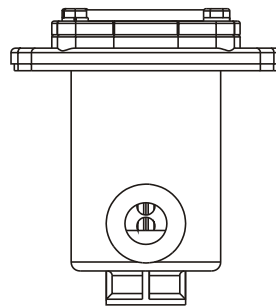
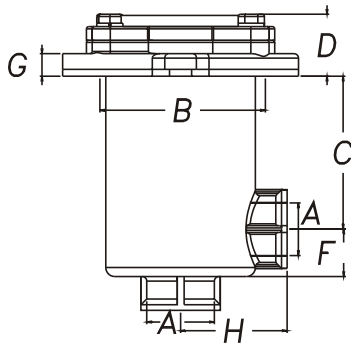
Filter Elements

Part Number	Series	List Price \$	Micron	Max Flow	D	B mm	H
TIE-04-P10	TIFP-04	19.00	10	25 lpm	52	25.5	72
TIE-04-P25		19.00	25	40 lpm			
TIE-06-P10	TIFP-06	24.00	10	50 lpm	66	30.5	85
TIE-06-P25		24.00	25	65 lpm			
TIE-08-P10	TIFP-08	30.00	10	100 lpm	90	40.5	245
TIE-08-P25		30.00	25	120 lpm			
TIE-10-P10	TIFP-10	66.00	10	100 lpm	90	40.5	245
TIE-10-P25		66.00	25	120 lpm			

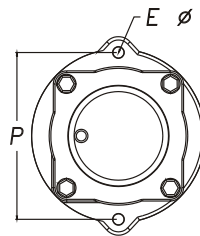


Part Number	List Price \$	Port Size (A)	Micron	Max Flow Rate	Bypass
FIF-04B-P10-R4	93.00	1/2" BSPP	10 µm Nominal	25 lpm	25 psi
FIF-06B-P10-R4	127.00	3/4" BSPP		40 lpm	
FIF-08B-P10-R4	149.00	1" BSPP		50 lpm	
FIF-10B-P10-R4	330.00	1.1/4" BSPP		100 lpm	

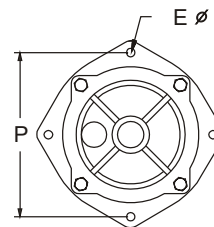
Dimensions (mm)



	FIF-04	FIF-06	FIF-08	FIF-10
B	80	105	105	156
C	71	68	110	190
D	23	24	24	35
E	7	9	9	9
F	34	48	55	62
G	7	10	10	14
P	100	126	126	175



FIF 04/06/08

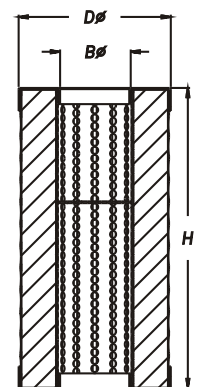


FIF 10



Filter Elements

Part Number	Series	List Price \$	Micron	Max Flow	D	B mm	H
FIE-04-P10	FIF-04	19.00	10	25 lpm	52	25.5	72
FIE-04-P25		19.00	25	40 lpm			
FIE-06-P10	FIF-06	24.00	10	50 lpm	66	30.5	85
FIE-06-P25		24.00	25	65 lpm			
FIE-08-P10	FIF-08	30.00	10	100 lpm	90	40.5	245
FIE-08-P25		30.00	25	120 lpm			
FIE-10-P10	FIF-10	61.00	10	100 lpm	90	40.5	245
FIE-10-P25		61.00	25	120 lpm			



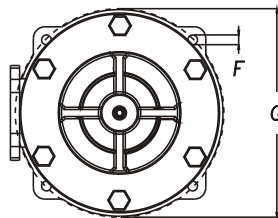
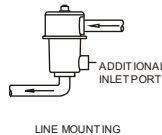
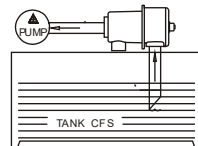
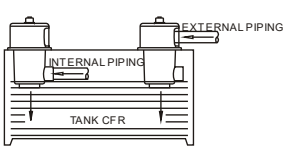
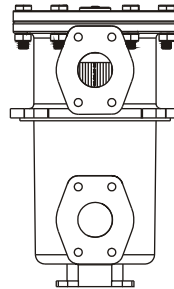
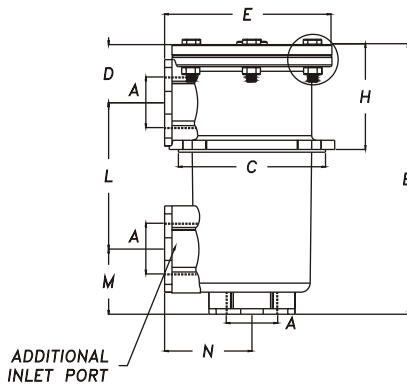
FILTRATION

Tank Top Return Filters - CFR Series

Part Number	List Price \$	Port Size (A)	Micron	Max Flow Rate	Bypass
CFR-025-04B-P10-R4	124.00	1/2" BSPP	10 µm Nominal	40 lpm	25 psi
CFR-040-06B-P10-R4	227.00	3/4" BSPP		60 lpm	
CFR-100-08B-P10-R4	340.00	1" BSPP		130 lpm	
CFR-250-12B-P10-R4	503.00	1.1/2" BSPP		150 lpm	

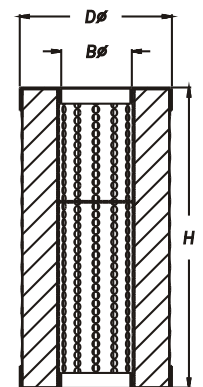
Dimensions (mm)

	CFR-025	CFR-040	CFR-100	CFR-250
B	117	176	257	300
C	83	121	134	161
D	29	43	64	65
E	98	117	143	182
F	5.6	6.5	6.5	8.5
G	93	138	154	180
H	46	77	113	117
L	56	110	140	159
M	33	26	52	77
N	52	58	71	88



Filter Elements

Part Number	Series	List Price \$	Micron	Max Flow	D	B mm	H
CE-025-P10	CFR-025	21.00	10	40 lpm	52	25.5	72
CE-025-P25		21.00	25	45 lpm			
CE-040-P10	CFR-040	25.00	10	60 lpm	70	34.5	86
CE-040-P25		25.00	25	85 lpm			
CE-100-P10	CFR-100	35.00	10	130 lpm	100	51	130
CE-100-P25		35.00	25	140 lpm			
CE-250-P10	CFR-250	66.00	10	150 lpm	100	51	210
CE-250-P25		66.00	25	180 lpm			

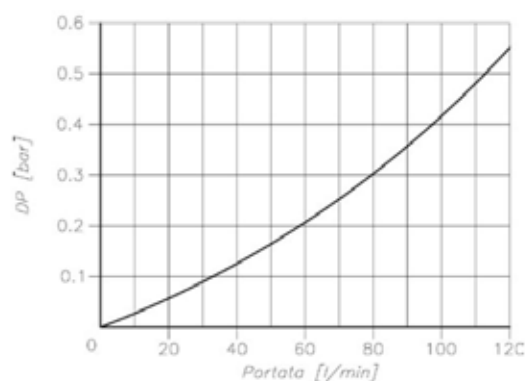


FSD Series

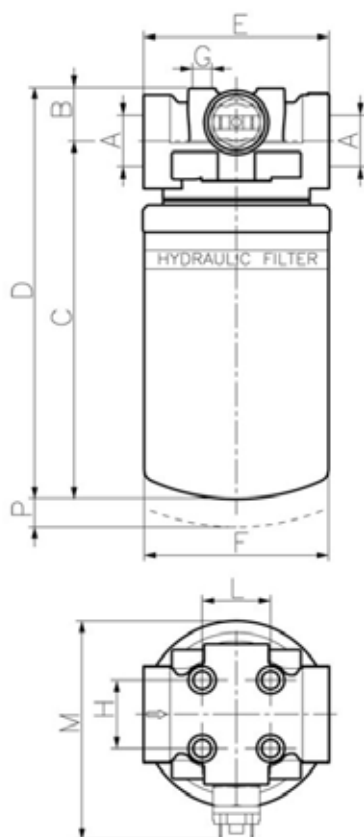
Part Number	List Price \$	Port Size	Micron	Max Pressure	Flow Rate	Bypass	Differential Indicator
FSD0602AGV2P10AD	376.00	1" BSPP	10 µm	35 bar	60 lpm	50 psi	43 psi
FSD0602AGV2P25AD	304.00		25 µm		80 lpm		
FSD0602AGV2P06AD	304.00		6 µm		95 lpm		

Filter Elements

Part Number	List Price \$	Micron
CSD06000A06A	170.00	6 µm
CSD06000P10A	98.00	10 µm
CSD06000P25A	98.00	25 µm



Dimension	
A	1"
B	34mm
C	185mm
D	219mm
E	95mm
F	95mm
G	M8
H	38mm
L	38mm
M	112mm
P	25mm



PRESSURE DROP

Curves are calculated in accordance with ISO 3968 and are valid for clean filtering elements.

△P changes along with the density in presence of an eddy flow, and along with the dynamic viscosity in presence of a laminar flux. Curves are valid for mineral oils with a density of 0.86 kg/dm³ and a dynamic viscosity of 30mm²/sec (cSt).

When choosing the filtering medium, consider the pressure losses deriving from the flow rate:

* Up to **1 ÷ 1.5 bar** for suction line

* Up to **0.3 ÷ 0.5 bar** for filters fitted on return line

(The total pressure drop is to be calculated by adding up the spin-on filter pressure drop).

FHP 0104 Series - 420 bar, 6 bar pypass

Part Number	List Price \$	Port Size	Micron
FHP0104BAD2A03NP01	989.00	3/8" BSPP	3 µm
FHP0104BAD2A06NP01	979.00		6 µm
FHP0104BAD2A10NP01	973.00		10 µm
FHP0104BAD2A25NP01	968.00		25 µm

Filter Elements

Part Number	List Price \$	Micron
HP0114A03ANP01	232.00	3 µm
HP0114A06ANP01	227.00	6 µm
HP0114A10ANP01	221.00	10 µm
HP0114A25ANP01	216.00	25 µm

Indicators

Part Number	List Price \$	Type
DEA50HA50P01	314.00	Electrical
DVM50HP01	283.00	Visual

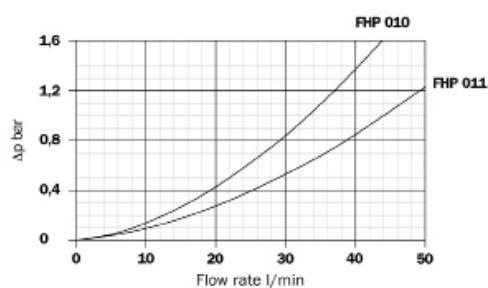
Contact us for further
technical specifications



Pressure drops Δp Housing

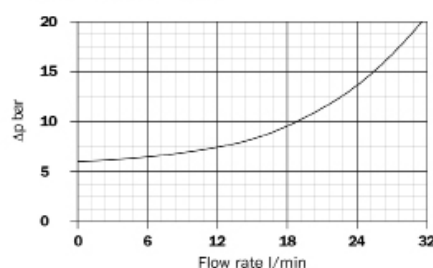
The curves are plotted using mineral oil with density of 0.86 kg/dm³ to ISO 3968.

Δp varies proportional with density.

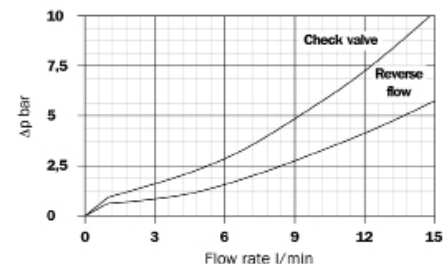


Valves

Bypass valve pressure drop



Filter housing with check valve



High Pressure filters Maximum pressure up to 420 bar - Flow rate up to 750 l/min

Filter housing materials

- Head: Phosphatized cast iron
- Housing: Phosphatized steel
- Bypass valve:
 - AISI 316L (FHP 010 - 011)
 - Brass (FHP 065 - 135 - 320)
 - Steel (FHP 500)
- Reverse Flow: Steel (FHP 320 - FHP 500)
- Check valve: Steel

Pressure

- Working pressure: 42 MPa (420 bar)
- Test pressure: 63 MPa (630 bar)
- Burst pressure: 126 MPa (1260 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 42 MPa (420 bar)

Bypass valve

- Opening pressure 600 kPa (6 bar)
- Other opening pressures on request.

Δp element type

- Microfibre filter elements - series N: 20 bar
- Microfibre filter elements - series R: 20 bar (not available for FHP 010-011 and FHP 500)
- Microfibre filter elements - series H: 210 bar
- Microfibre filter elements - series S: 210 bar (only for FHP 500)
- Wire mesh filter elements - series N: 20 bar
- Fluid flow through the filter element from OUT to IN.

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

From -25 °C to +110 °C

Connections

FHP 010 - 065 - 135 - 500:

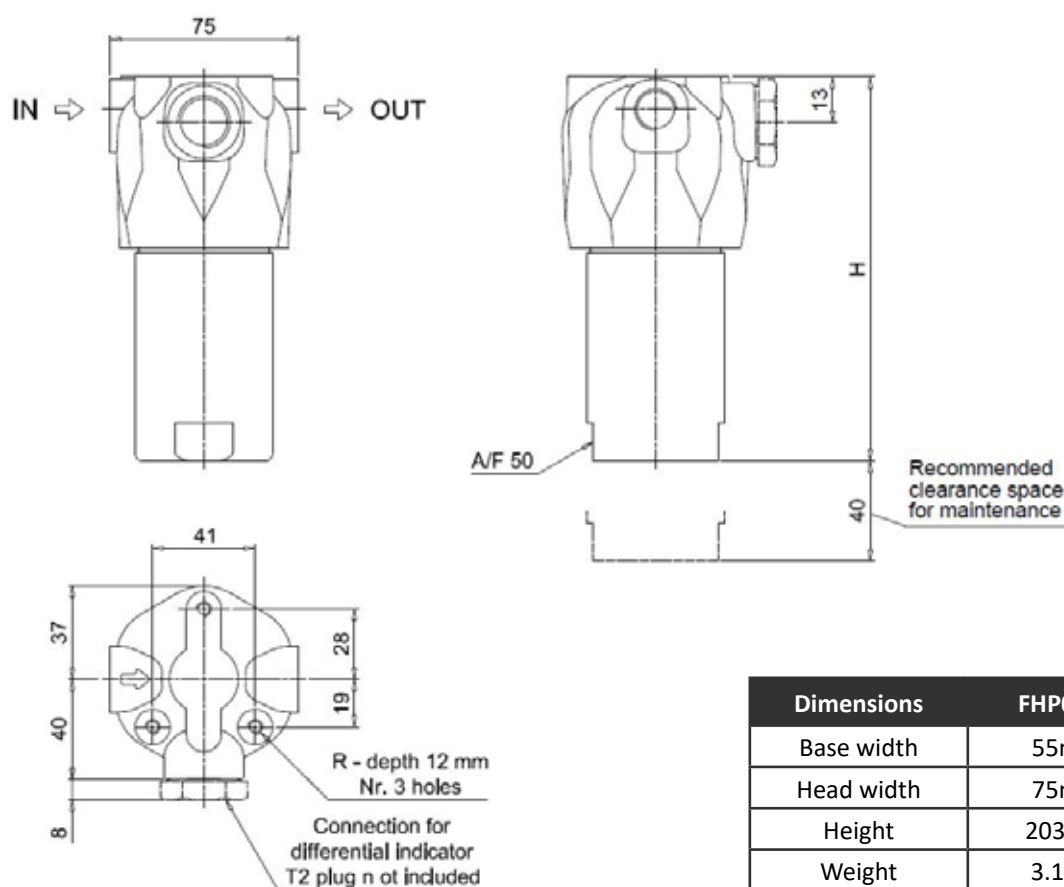
In-line Inlet/Outlet

FHP 011 - 320:

90° Inlet/Outlet

Note

FHP filters are provided for vertical mounting



Dimensions	FHP0104
Base width	55mm
Head width	75mm
Height	203mm
Weight	3.13kg
Volume	0.20dm ³

FHP Series 135 Series - 420 bar, 6 bar bypass

Part Number	List Price \$	Port Size	Micron
FHP1351BAG2A03NP01	1612.00	1" BSPP	3 µm
FHP1351BAG2A06NP01	1591.00		6 µm
FHP1351BAG2A10NP01	1535.00		10 µm
FHP1351BAG2A25NP01	1509.00		25 µm
FHP1353BAG2A03NP01	2127.00		3 µm
FHP1353BAG2A06NP01	2112.00		6 µm
FHP1353BAG2A10NP01	2039.00		10 µm
FHP1353BAG2A25NP01	1931.00		25 µm

Filter Elements

Part Number	List Price \$	Micron
HP1351A03ANP01	304.00	3 µm
HP1351A06ANP01	299.00	6 µm
HP1351A10ANP01	252.00	10 µm
HP1351A25ANP01	211.00	25 µm
HP1353A03ANP01	567.00	3 µm
HP1353A06ANP01	551.00	6 µm
HP1353A10ANP01	443.00	10 µm
HP1353A25ANP01	355.00	25 µm

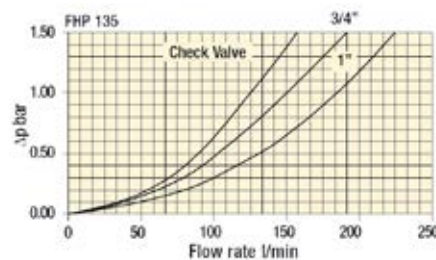
Indicators

Part Number	List Price \$	Type
DEA50HA50P01	314.00	Electrical
DVM50HP01	283.00	Visual

Contact us for further
technical specifications



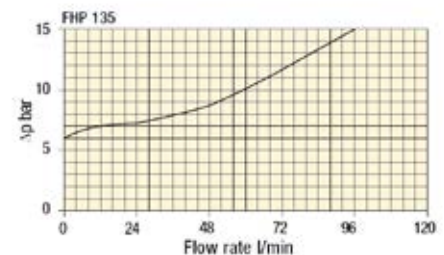
Filter housings Δp pressure drop



Pressure drops Δp Housing
The curves are plotted using mineral oil
with density of 0.85 kg/dm³ to ISO 3968.
 Δp varies proportional with density.



Bypass valve pressure drop



High Pressure filters

Maximum pressure up to 420 bar - Flow rate up to 750 l/min

Filter housing materials

- Head: Phosphatized cast iron
- Housing: Phosphatized steel
- Bypass valve:
 - AISI 316L (FHP 010 - 011)
 - Brass (FHP 065 - 135 - 320)
 - Steel (FHP 500)
- Reverse Flow: Steel (FHP 320 - FHP 500)
- Check valve: Steel

Pressure

- Working pressure: 42 MPa (420 bar)
- Test pressure: 63 MPa (630 bar)
- Burst pressure: 126 MPa (1260 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 42 MPa (420 bar)

Bypass valve

- Opening pressure 600 kPa (6 bar)
- Other opening pressures on request.

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

From -25 °C to +110 °C

Connections

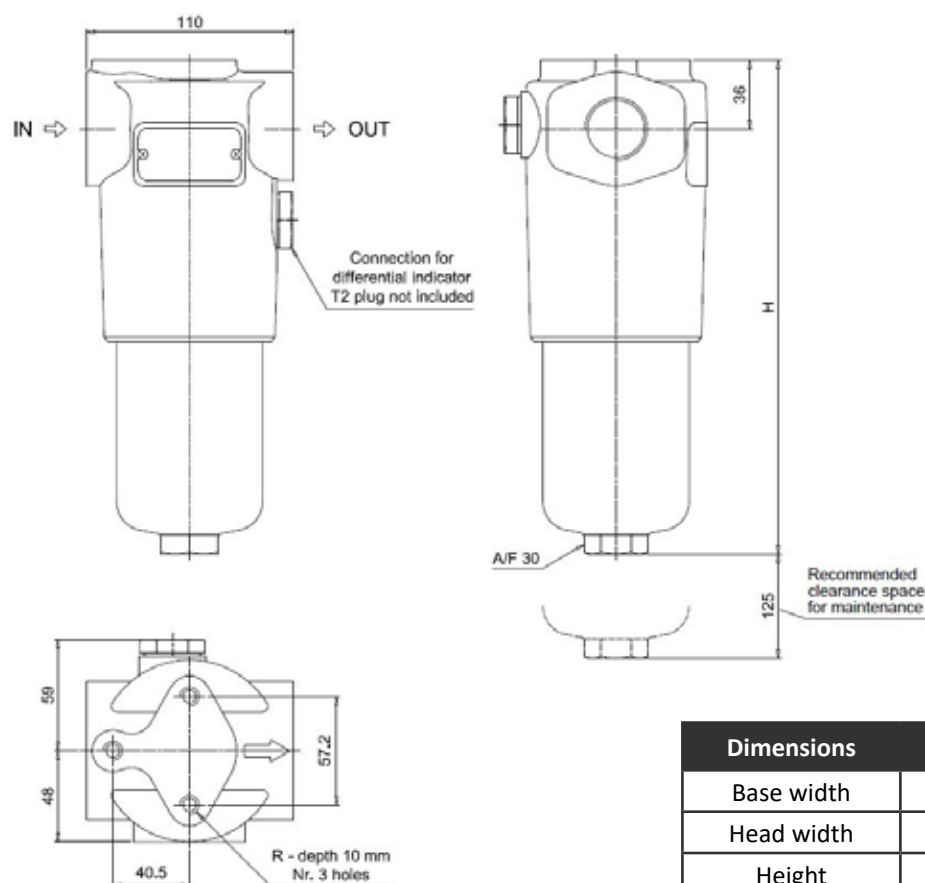
FHP 010 - 065 - 135 - 500:
In-line Inlet/Outlet
FHP 011 - 320:
90° Inlet/Outlet

Note

FHP filters are provided for vertical mounting

Δp element type

- Microfibre filter elements - series N: 20 bar
- Microfibre filter elements - series R: 20 bar (not available for FHP 010-011 and FHP 500)
- Microfibre filter elements - series H: 210 bar
- Microfibre filter elements - series S: 210 bar (only for FHP 500)
- Wire mesh filter elements - series N: 20 bar
- Fluid flow through the filter element from OUT to IN.



Dimensions	FHP1351	FHP1353
Base width	77mm	77mm
Head width	110mm	110mm
Height	260mm	448mm
Weight	7.11kg	9.76kg
Volume	0.43dm ³	0.97dm ³

FMP Series - 320 bar, 6 bar bypass

Part Number	List Price \$	Port Size	Micron
FMP3202BAG1A03NP01	2627.00	1.1/4" BSP	3 µm
FMP3202BAG1A06NP01	2616.00		6 µm
FMP3202BAG1A10NP01	2487.00		10 µm
FMP3202BAG1A25NP01	2359.00		25 µm

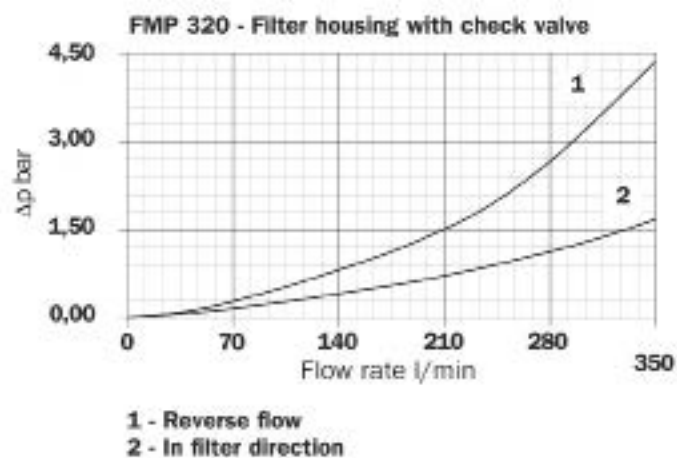
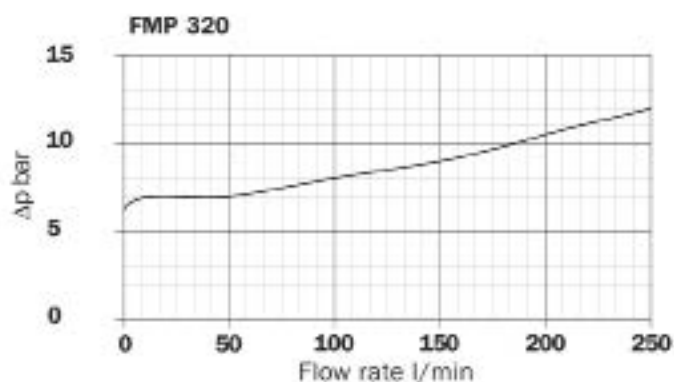
Filter Elements

Part Number	List Price \$	Micron
HP3202A03ANP01	721.00	3 µm
HP3202A06ANP01	706.00	6 µm
HP3202A10ANP01	582.00	10 µm
HP3202A25ANP01	453.00	25 µm

Indicators

Part Number	List Price \$	Type
DEA50HA50P01	314.00	Electrical
DVM50HP01	283.00	Visual

Contact us for further
technical specifications



High Pressure filters Maximum pressure up to 320 bar - Flow rate up to 475 l/min

Filter housing materials

- Head: Phosphatized cast iron
- Housing: Phosphatized steel
- Bypass valve: Brass
- Reverse Flow: Steel (only for series FMP 320)
- Check valve: Steel

Pressure

- Working pressure: 32 MPa (320 bar)
- Test pressure: 48 MPa (480 bar)
- Burst pressure: 96 MPa (960 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 32 MPa (320 bar)

Bypass valve

- Opening pressure 600 kPa (6 bar)
- Other opening pressures on request.

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

From -25 °C to +110 °C

Δp element type

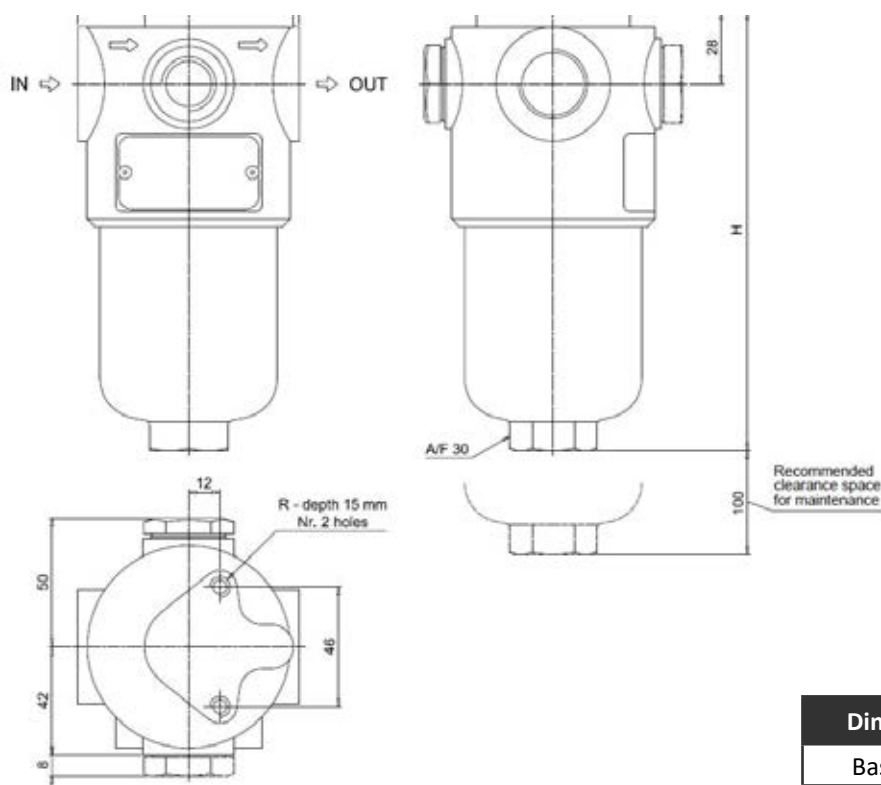
- Microfibre filter elements - series N-R: 20 bar
- Microfibre filter elements - series H-S: 210 bar
- Wire mesh filter elements - series N: 20 bar
- Fluid flow through the filter element from OUT to IN.

Connections

In-line Inlet/Outlet

Note

FMP filters are provided for vertical mounting



Dimensions	FMP3202
Base width	101mm
Head width	140mm
Height	386mm
Weight	13.08kg
Volume	1.75dm ³

FMM Series - 420 bar, 6 bar bypass

Part Number	List Price \$	Port Size	Micron
FMM0502BACA03NP01	809.00	1/2" BSPP	3 µm
FMM0502BACA06NP01	803.00		6 µm
FMM0502BACA10NP01	762.00		10 µm
FMM0502BACA25NP01	721.00		25 µm
FMM0502BADA03NP01	809.00	3/4" BSPP	3 µm
FMM0502BADA06NP01	803.00		6 µm
FMM0502BADA10NP01	762.00		10 µm
FMM0502BADA25NP01	721.00		25 µm
FMM0504BACA03NP01	968.00	1/2" BSPP	3 µm
FMM0504BACA06NP01	958.00		6 µm
FMM0504BACA10NP01	901.00		10 µm
FMM0504BACA25NP01	834.00		25 µm
FMM0504BADA03NP01	968.00	3/4" BSPP	3 µm
FMM0504BADA06NP01	958.00		6 µm
FMM0504BADA10NP01	901.00		10 µm
FMM0504BADA25NP01	834.00		25 µm

Filter Elements - FMM0502

Part Number	List Price \$	Micron
HP0502A03ANP01	242.00	3 µm
HP0502A06ANP01	237.00	6 µm
HP0502A10ANP01	196.00	10 µm
HP0502A25ANP01	155.00	25 µm

Filter Elements - FMM0504

Part Number	List Price \$	Micron
HP0504A03ANP01	371.00	3 µm
HP0504A06ANP01	366.00	6 µm
HP0504A10ANP01	304.00	10 µm
HP0504A25ANP01	242.00	25 µm

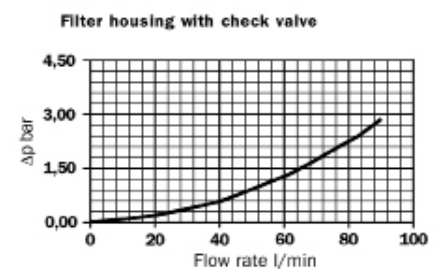
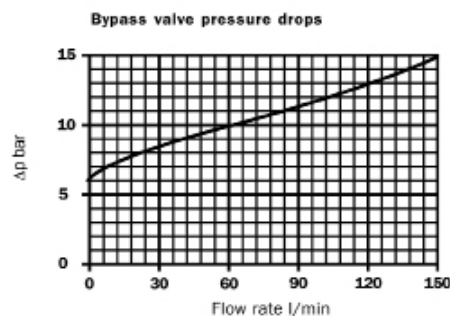
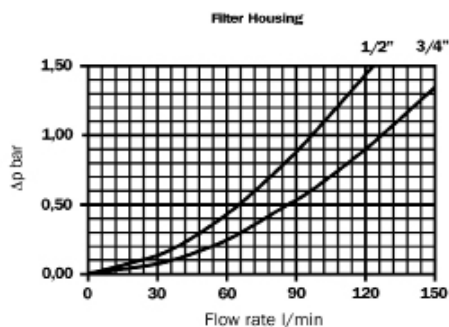
Indicators

Part Number	List Price \$	Type
DEA50HA50P01	314.00	Electrical
DVM50HP01	283.00	Visual

Pressure drops Δp Housing

The curves are plotted using mineral oil with density of 0.86 kg/dm³ to ISO 3968.

Δp varies proportional with density.



High Pressure filters

FMM 050

Maximum pressure up to 420 bar

Flow rate up to 152 l/min

Filter housing materials

- Head: Phosphatized cast iron
- Housing: Phosphatized steel
- Bypass valve: Steel

Pressure

- Working pressure: 42 MPa (420 bar)
- Test pressure: 63 MPa (630 bar)
- Burst pressure: 126 MPa (1260 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 42 MPa (420 bar)

FMM 050

Bypass valve

- Opening pressure 600 kPa (6 bar)
- Other opening pressures on request.

Δp element type

- Microfibre filter elements - series N: 20 bar
- Microfibre filter elements - series S: 210 bar
- Wire mesh filter elements - series N: 20 bar
- Fluid flow through the filter element from OUT to IN

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

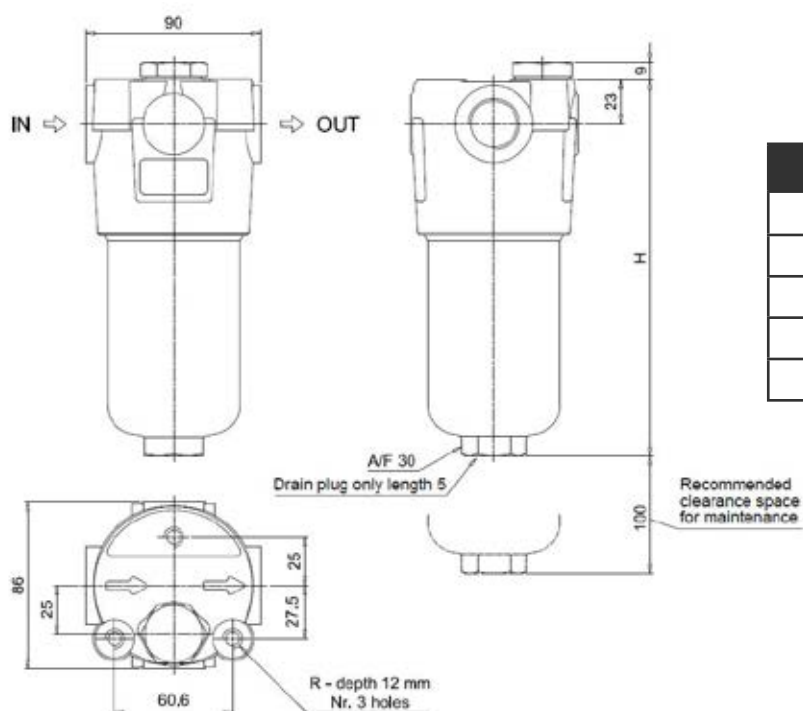
From -25 °C to +110 °C

Connections

In-line Inlet/Outlet

Note

Both FMM and FHA filters are provided for vertical mounting



Dimensions	FMM0502	FMM0504
Base width	68mm	68mm
Head width	90mm	90mm
Height	195mm	285mm
Weight	3.48kg	4.36kg
Volume	0.48dm ³	0.81dm ³

Contact us for further technical specifications

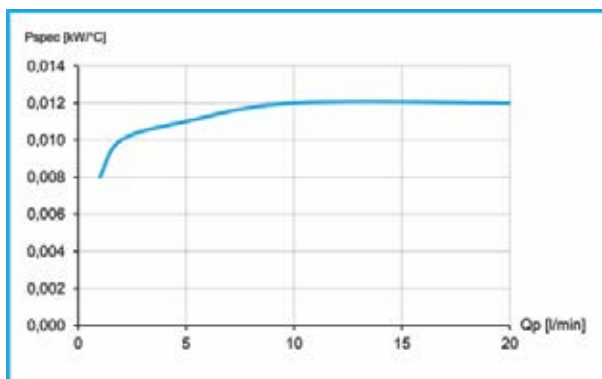
Lowline Series	290
TT Rail Series DC	293
TT Rail Series AC	295
TT Rail Series Hydraulic Drive	296
ASA Series DC	297
ASA Series AC	298
ASA Series Hydraulic Drive	299
Connector Kits	300
Rail Filter Series	301
Radiator Cores	301
Integrated Suction Filter & Tank 12v & 24v Mixer Cooler	302
Temperature Controllers, Sensors & Switches	303
Temperature Bypass Valves	305
Foot Mounting Kits & Protection Housings	305
Rubber Vibration Absorbers	306
CC Series Offline Cooling	307
Brazed Plate Heat Exchangers	309
Butterfly Valves & Adaptor Flanges	310
Compensators & Limit Switches	311
ASA Pump Units	312
H-Cube Series	313

Low Line Series

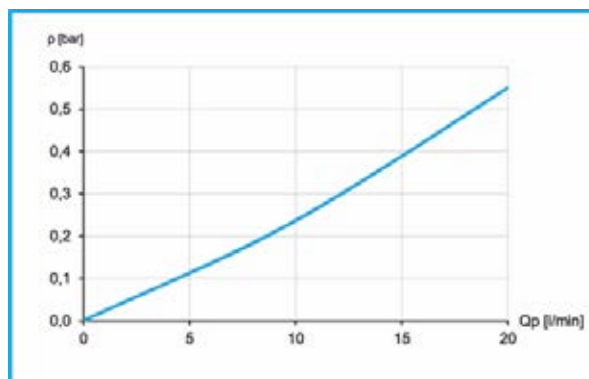
Part Number	List Price \$	Voltage	Current	Ports	Max Pressure	H	W mm	D
ASA0013GD01	740.00	12v DC	0.30a	1/2" BSPP	26 Bar	119	120	92
ASA0013GD02	740.00	24v DC	0.15a					
ASA0013GE01	530.00	240v AC	0.12a					



Specific cooling performance



Pressure drop at 30°C

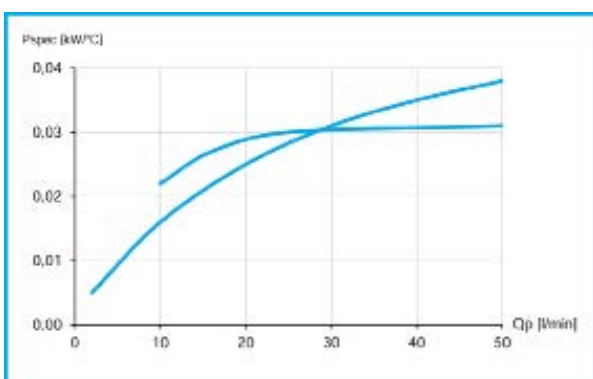


See page 303 for options

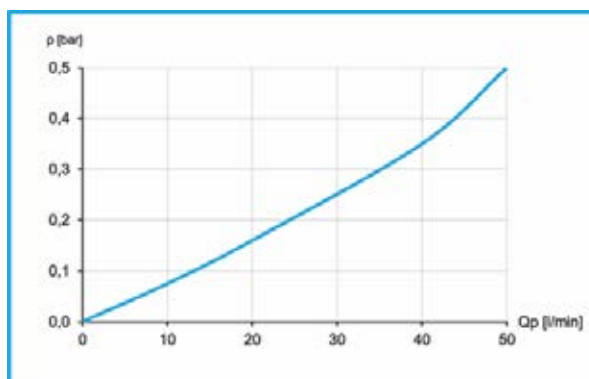
Part Number	List Price \$	Voltage	Current	Ports	Max Pressure	H	W mm	D
ASA0023GD01	665.00	12v DC	5.4a	3/4" BSPP	26 Bar	180	229	98
ASA0023GD02	665.00	24v DC	2.7a					
ASA0023GE02	830.00	240v AC	0.25a					



Specific cooling performance



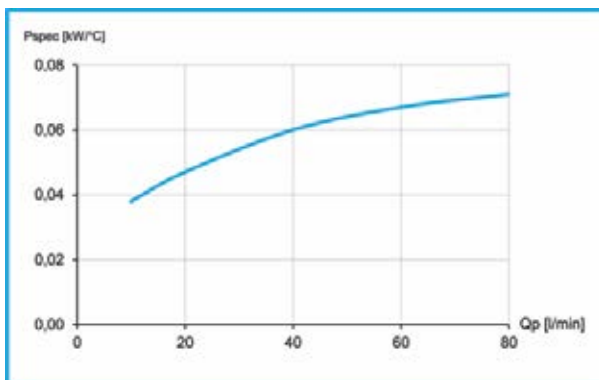
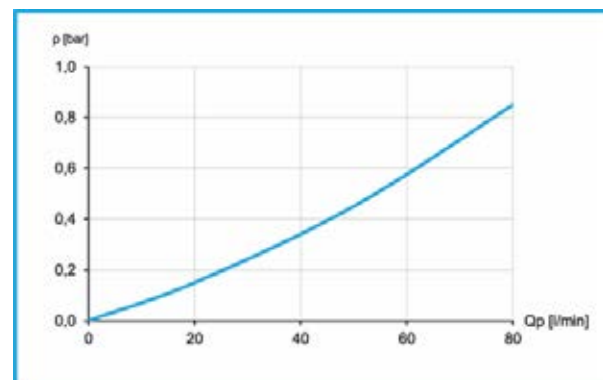
Pressure drop at 30°C



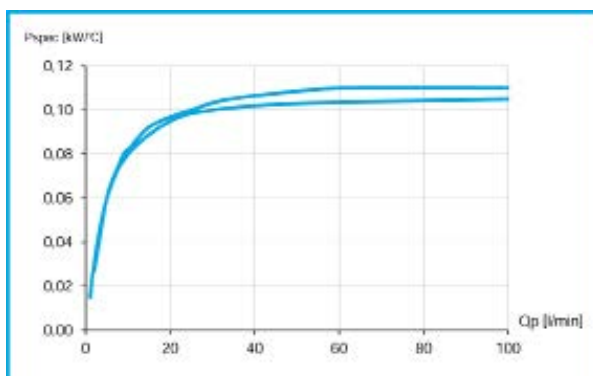
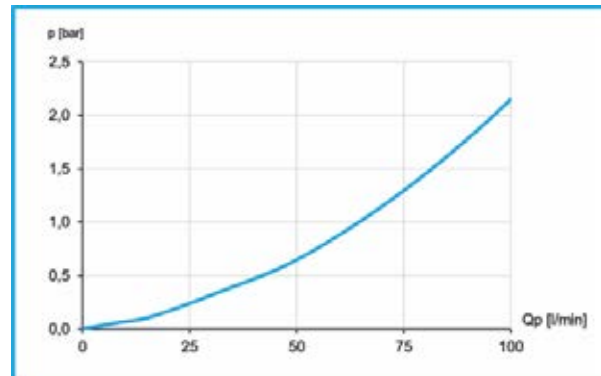
See page 303 for options

Low Line Series

Part Number	List Price \$	Voltage	Current	Ports	Max Pressure	H	W mm	D
ASA0043GD01	700.00	12v DC	5.4a	3/4" BSPP	26 Bar	205	210	115
ASA0043GD02	700.00	24v DC	2.7a					
ASA0043GE02	880.00	240v AC	0.25a					
ASA0043GI02	1090.00	415v AC	0.15a			205	210	143


Specific cooling performance

Pressure drop at 30°C


Part Number	List Price \$	Voltage	Current	Bypass	Ports	Max Pressure	H	W mm	D
ASATT06GD03	760.00	12v DC	7.4a	n/a	3/4" BSPP	26 Bar	290	320	125
ASATT06GD03BP	820.00			Internal					
ASATT06GD04	760.00	24v DC	3.7a	n/a					
ASATT06GD04BP	820.00			Internal					
ASATT06GC2E	1420.00	240v AC	0.45a	n/a					
ASATT06GC2EBP	1440.00			Internal					


Specific cooling performance

Pressure drop at 30°C


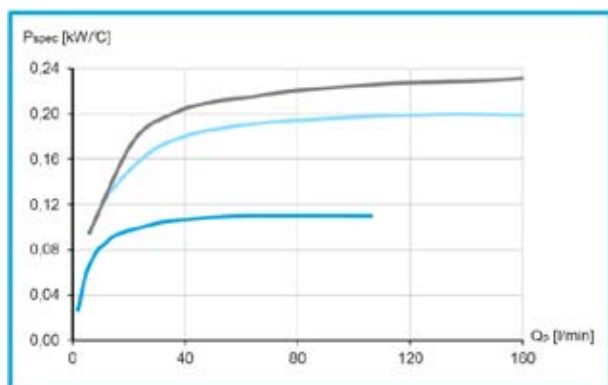
See page 303 for options

Low Line Series

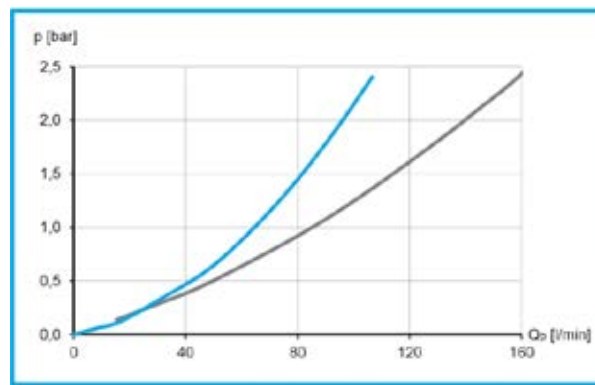
Part Number	List Price \$	Voltage	Current	Bypass	Ports	Max Pressure	H	W mm	D
ASA0084GD01	1102.00	12v DC	12.2a	n/a	1" BSPP	26 Bar	380	386	136
ASA0084GD01BP	1147.00			Internal					
ASA0084GD02	1102.00	24v DC	5.6a	n/a					
ASA0084GD02BP	1147.00			Internal					
ASA0084GD03	1142.00	12v DC	21.2a	n/a				386	157
ASA0084GD03BP	1186.00			Internal					
ASA0084GD04	1142.00	24v DC	10.6a	n/a					
ASA0084GD04BP	1186.00			Internal					
ASA0084GC2E	1844.00	240v AC	0.55a	n/a				386	226
ASA0084GC2EBP	1907.00			Internal					



Specific cooling performance



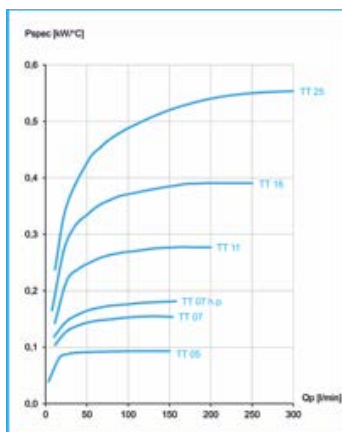
Pressure drop at 30°C



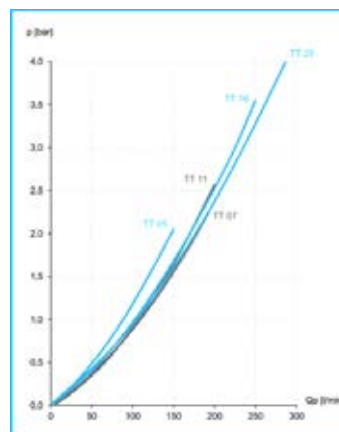
See page 303 for options

TT Rail Series - DC

Part Number	List Price \$	Voltage	Current	Bypass	Max Pressure	H	W mm	D
ASATT07RD01	1000.00	12v	10.4a	None	26 Bar	300	320	160
ASATT07RD02	1000.00	24v	5.2a			300	320	176
ASATT07RD03	1090.00	12v	16.2a			340	380	175
ASATT07RD04	1090.00	24v	8.1a			420	405	205
ASATT11RD01	1240.00	12v	20.8a			465	460	190
ASATT11RD02	1240.00	24v	10.4a			605	460	243
ASATT13RD01	1531.00	12v	20.8a			605	555	257
ASATT13RD02	1531.00	24v	10.4a			300	320	160
ASATT16RD01	1820.00	12v	18.6a			300	320	176
ASATT16RD02	1820.00	24v	9.3a			340	380	175
ASATT21RD01	2122.00	12v	18.6a			420	405	205
ASATT21RD02	2122.00	24v	9.3a			465	460	190
ASATT25RD01	2511.00	12v	18.6a			605	460	243
ASATT25RD02	2511.00	24v	9.3a			605	555	257
ASATT07RD01BP	1310.00	12v	10.4a	2 bar standard 1 or 5 bar on request	26 Bar	300	320	160
ASATT07RD02BP	1310.00	24v	5.2a			300	320	176
ASATT07RD03BP	1390.00	12v	16.2a			340	380	175
ASATT07RD04BP	1390.00	24v	8.1a			420	405	205
ASATT11RD01BP	1470.00	12v	20.8a			465	460	190
ASATT11RD02BP	1470.00	24v	10.4a			605	460	243
ASATT13RD01BP	1717.00	12v	20.8a			605	555	257
ASATT13RD02BP	1717.00	24v	10.4a			300	320	160
ASATT16RD01BP	1960.00	12v	18.6a			300	320	176
ASATT16RD02BP	1960.00	24v	9.3a			340	380	175
ASATT21RD01BP	2284.00	12v	18.6a			420	405	205
ASATT21RD02BP	2284.00	24v	9.3a			465	460	190
ASATT25RD01BP	2665.00	12v	18.6a			605	460	243
ASATT25RD02BP	2665.00	24v	9.3a			605	555	257



Specific cooling performance



Pressure drop at 30°C



Must use with connector kits for ports, see page 300

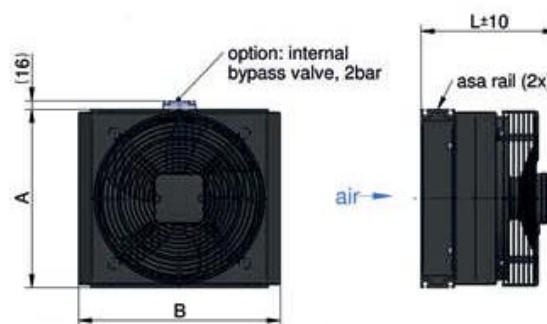
See page 303 for options

TT Rail Series Compact - 240v AC - Motor Included

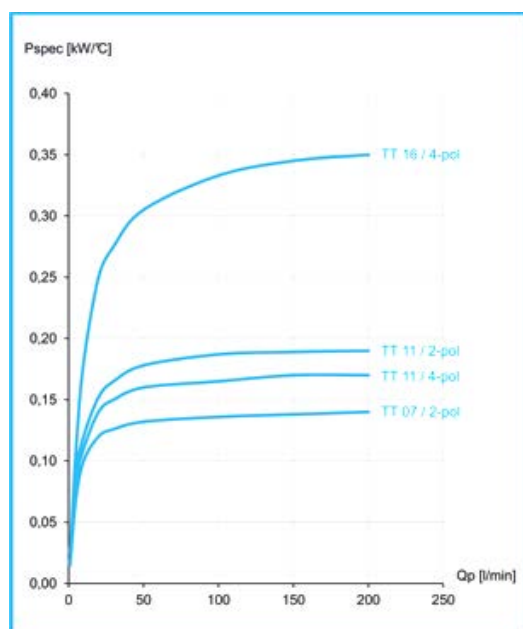
Part Number	List Price \$	Voltage	Current	Bypass	Max Pressure	A	B mm	L
ASATT07RC2E	1430.00	240v	0.45a	None	26 Bar	300	325	260
ASATT11RC4E	1590.00		0.42a			340	385	260
ASATT11RC2E	1590.00		0.55a			465	465	285
ASATT16RC4E	2410.00		0.85a			300	325	260
ASATT07RC2EBP	1720.00		0.45a	2 bar standard 1 or 5 bar on request		340	385	260
ASATT11RC4EBP	1750.00		0.42a			465	465	285
ASATT11RC2EBP	1750.00		0.55a			300	325	260
ASATT16RC4EBP	2490.00		0.85a			340	385	260

See page 303 for options

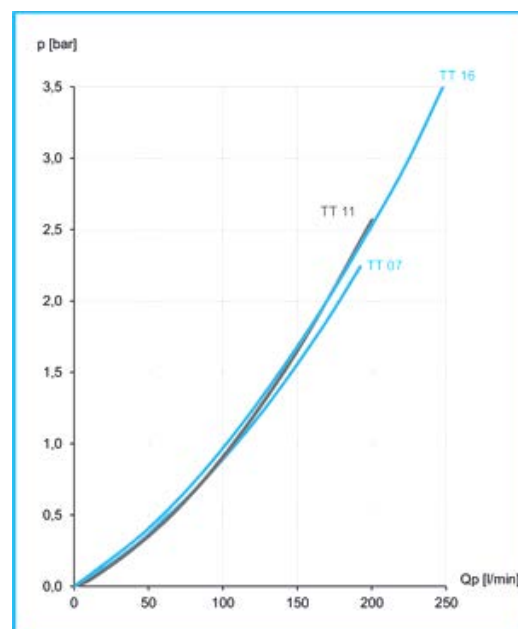
Must use with connector kits for ports, see page 300



Specific cooling performance



Pressure drop at 30°C



TT Rail Series - 240/415v AC - Motor Not Included

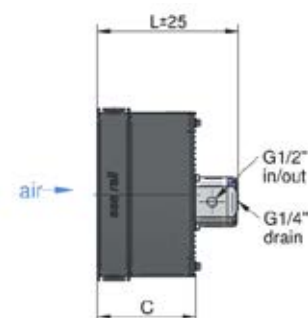
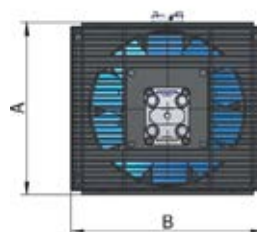
Part Number	List Price \$	Motor Size	Bypass	Max Pressure	A	B	C	L	
					mm				
ASATT07RA00NM	1410.00	0.25kW 4P / 0.55kW 2P, D71 (B14)	None	26 Bar	300	320	193	396	
ASATT11RA00NM	1750.00				340	380	193	398	
ASATT16RA40NM	2600.00	465			460	218	414		
ASATT16RA20NM	2650.00	0.55kW 2P, D71 (B14)			605	555	218	449	
ASATT25RA00NM	3460.00				0.37kW 6P / 0.75kW 4P, D80 (B14)	300	320	193	396
ASATT07RA00BPNM	1750.00	0.25kW 4P / 0.55kW 2P, D71 (B14)	2 bar standard 1 or 5 bar on request		D71	380	193	398	
ASATT11RA00BPNM	2060.00				465	460	218	414	
ASATT16RA40BPNM	2720.00	605			555	218	449		
ASATT16RA20BPNM	2790.00	300			320	193	396		
ASATT25RA00BPNM	3600.00	0.37kW 6P / 0.75kW 4P, D80 (B14)			D71	380	193	398	

TT Rail Series - Hydraulic Drive

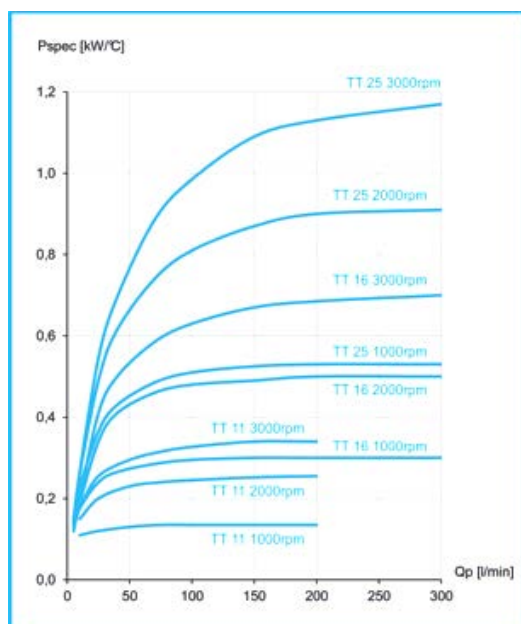
Part Number	List Price \$	Motor Size	Bypass	Max Pressure	A	B	C	L	
					mm				
ASATT11RH11	2660.00	Group 2 DIN 11cc	None	26 bar	340	380	193	277	
ASATT16RH11	3410.00				465	460	218	302	
ASATT25RH11	4360.00				605	555	218	302	
ASATT11RH11BP	2830.00		2 bar standard 1 or 5 bar on request		340	380	193	277	
ASATT16RH11BP	3540.00				465	460	218	302	
ASATT25RH11BP	4370.00				605	555	218	302	

See page 303 for options

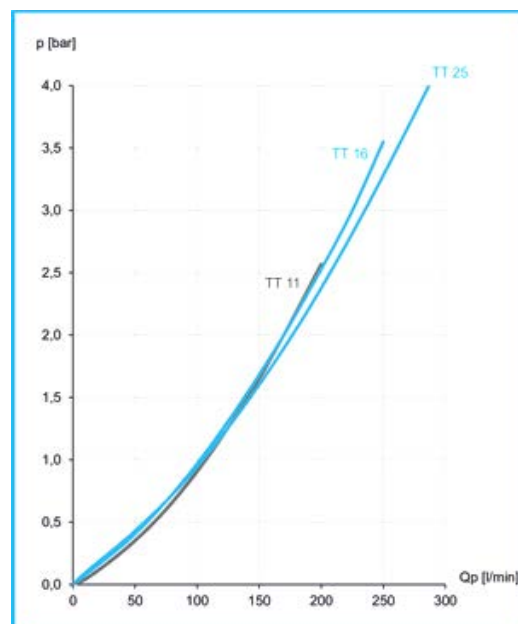
Must use with connector kits for ports, see page 300



Specific cooling performance

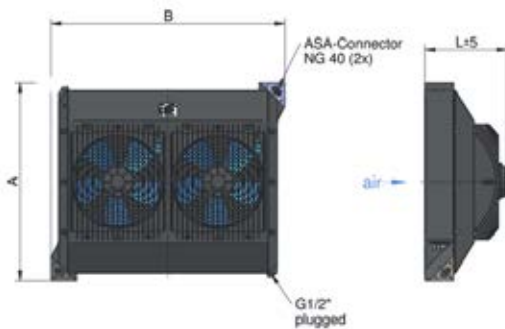
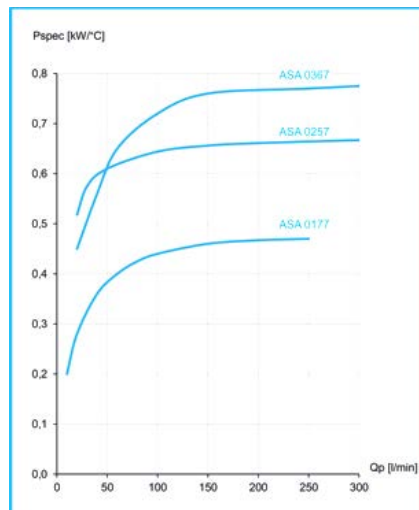
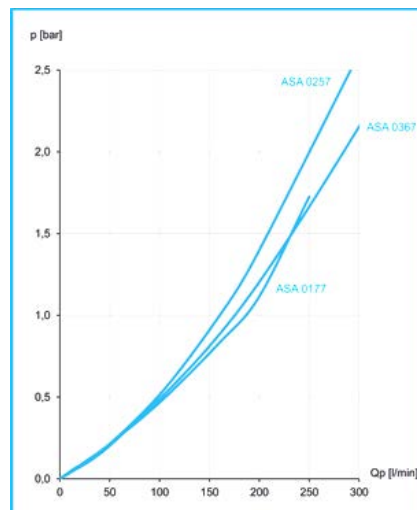


Pressure drop at 30°C



ASA Series - DC

Part Number	List Price \$	Voltage	Current	Bypass	Max Pressure	A	B mm	L
ASA0177AD01	2600.00	12v	18.6a	None	26 Bar	470	590	228
ASA0177AD02	2600.00	24v	9.3a					
ASA0257AD01	3610.00	12v	20.8a			555	690	259
ASA0257AD02	3610.00	24v	10.4a					
ASA0257AD03	4150.00	12v	2 x 20.8a					
ASA0257AD04	4150.00	24v	2 x 10.4a					
ASA0367AD01	4890.00	12v	2 x 20.8a			650	770	271
ASA0367AD02	4890.00	24v	2 x 10.4a					
ASA0177AD01BP	2640.00	12v	18.6a	2 bar standard 0.5/3.5 bar on request	26 Bar	470	590	228
ASA0177AD02BP	2640.00	24v	9.3a					
ASA0257AD03BP	4240.00	12v	2 x 20.8a			555	690	259
ASA0257AD04BP	4240.00	24v	2 x 10.4a					
ASA0367AD01BP	4940.00	12v	2 x 20.8a			650	770	271
ASA0367AD02BP	4940.00	24v	2 x 10.4a					


Specific cooling performance

Pressure drop at 30°C


Must use with connector kits for ports, see page 300

See page 303 for options

ASA Series - 240/415v AC - Motor Not Included

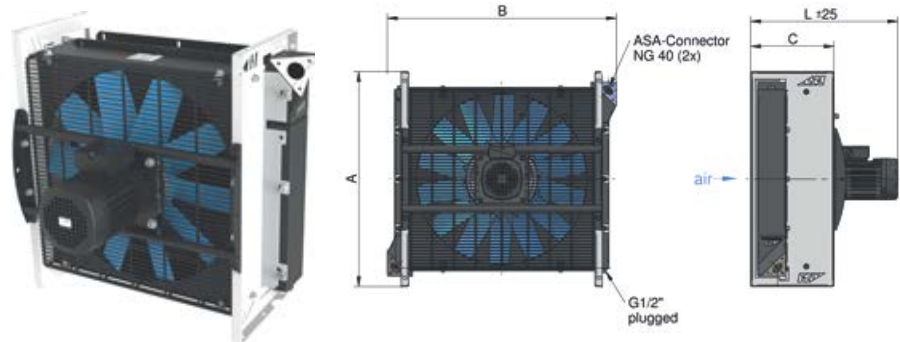
Part Number	List Price \$	Motor Size	Max Pressure	A	B	C	L
				mm			
ASA0177AA20NM	3300.00	0.55kW 2P - D71(B14)	26 Bar	530	582	260	486
ASA0177AA40NM	3330.00	0.25kW 4P 0.18kW 6P - D71(B14)					
ASA0257AA47NM	4200.00	0.75kW 4P - D80(B14)		635	682	270	531
ASA0257AA66NM	4210.00	0.37kW 6P - D80(B14)					
ASA0367AA46NM	4790.00	0.75kW 4P - D80(B14)		720	770	280	541
ASA0367AA66NM	5010.00	0.37kW 6P - D80(B14)					
ASA0467AA47NM	6860.00	0.75kW 4P - D80(B14)		785	837	290	738
ASA0467AA66NM	6860.00	0.37kW 6P - D80(B14)					
ASA0567AA46NM	6830.00	0.75kW 4P - D80(B14)		860	920	290	570
ASA0567AA66NM	6830.00	0.37kW 6P - D80(B14)					
ASA0927AA6ANM	10140.00	1.5kW 2P - D100(B14)		1100	1165	320	664

INTERNAL BYPASS
ON REQUEST

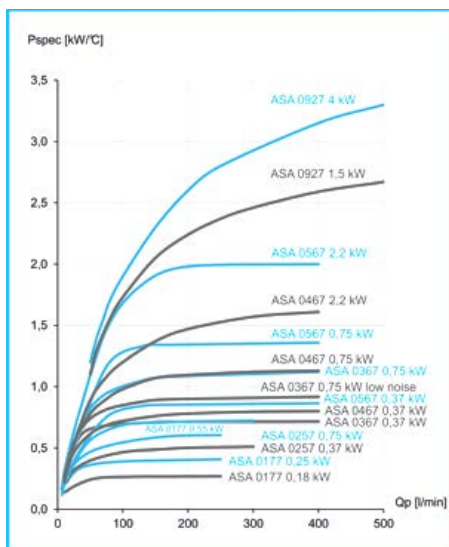
Must use with connector
kits for ports, see page 303



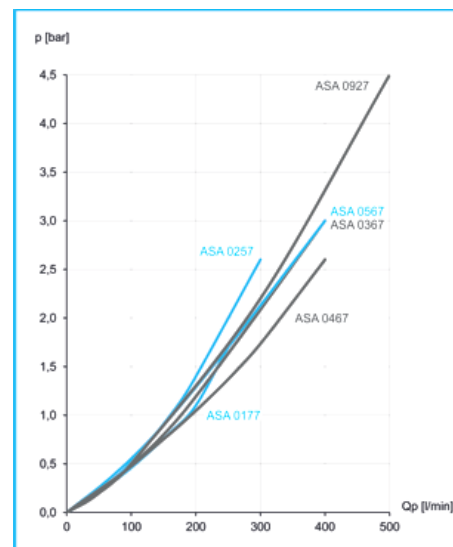
See page 300 for options



Specific cooling performance

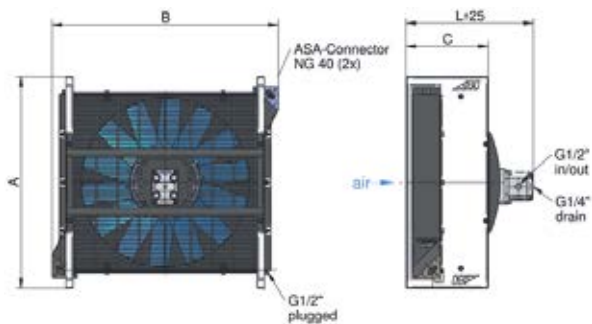


Pressure drop at 30°C



ASA Series - Hydraulic Drive

Part Number	List Price \$	Motor Size	Max Pressure	A	B mm	L
ASA0177AH11	4210.00	Group 2 DIN 11cc	26 bar	530	582	364
ASA0257AH11	5090.00			635	682	370
ASA0367AH11	6630.00			720	770	430
ASA0467AH11	8375.00			785	837	544
ASA0567AH11	8430.00			860	920	460
ASA0927AH11	11680.00			1100	1165	475

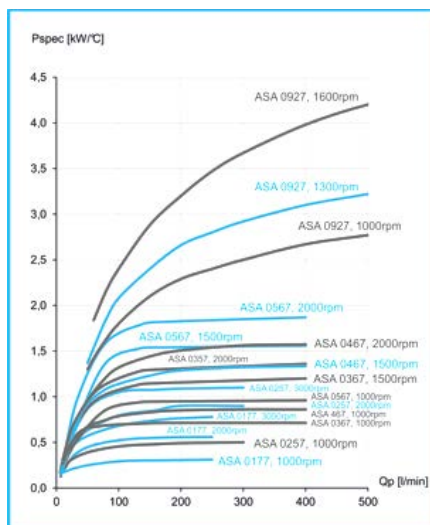
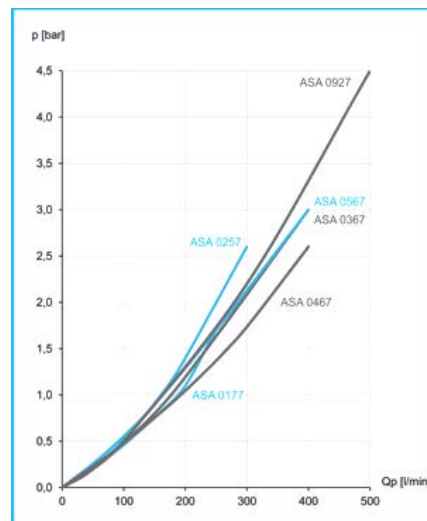


**INTERNAL BYPASS
ON REQUEST**

See page 303 for options

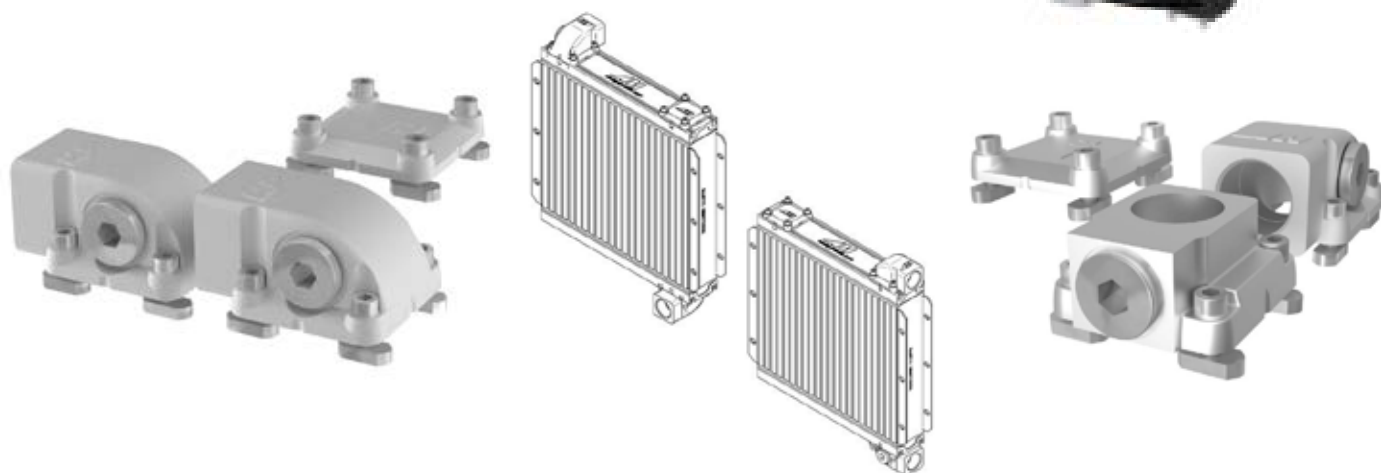


**Must use with connector
kits for ports, see page 300**

Specific cooling performance

Pressure drop at 30°C


Connector Kit for TT Series

Part Number	List Price \$	Port Size	Type
ILLZSET5G25	210.00	1" BSPP	2 x 90°
ILLZSET5G32	320.00	1.1/4" BSPP	2 x 90°
ILLZSET5G25A	210.00	1" BSPP	2 x Straight
ILLZSET5G25B	210.00	1" BSPP	1 x 90°, 1 x Straight



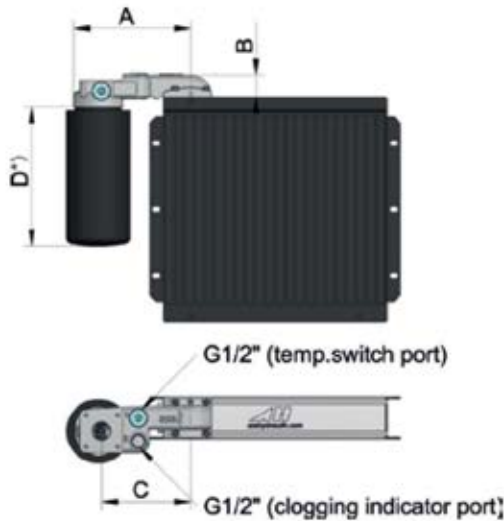
Connector Kit for ASA Series

Part Number	List Price \$	Port Size	Type
ILLZASA32G32	73.00	1.1/4" BSPP	2 connectors required per cooler
ILLZASA40G40	89.00	1.1/2" BSPP	
ILLZASA32U20	73.00	1.5/8" UNO	
ILLZASA40U24	89.00	1.7/8" UNO	
ILLZASA40-40G12	73.00	1/2" port sandwich plate	



Rail Filter Series

Part Number	List Price \$	Spin-on Port Size	Max Flow	Micron	Bypass	A	B	C	D
ILLZRF11G2010	534.00	3/4" BSPP	60 lpm	10µm	2 bar	177.5	33	135	146
ILLZRF11G2025	534.00			25µm					191
ILLZRF12G2010	545.00		100 lpm	10µm					
ILLZRF12G2025	545.00			25µm					



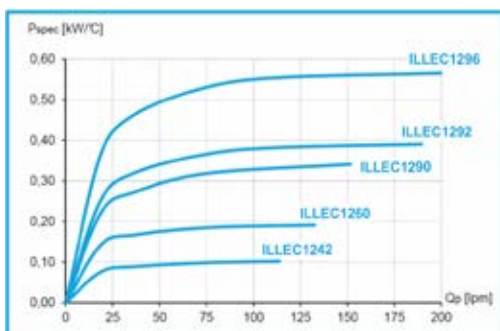
**Filter not included
For filters, see page 270**

Part Number	List Price \$	Description
HFZVEG15	288.00	Electrical clogging indicator G 1/2"
HFZVOG15	224.00	Optical clogging indicator G 1/2"

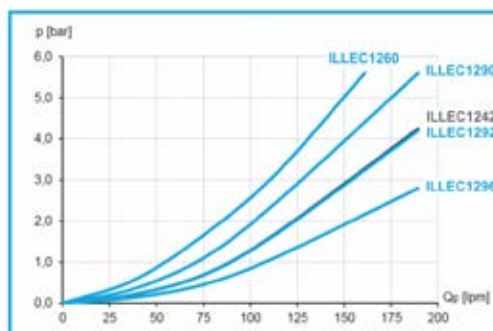
12 Series Radiator Cores

Part Number	List Price \$	Material	Max Pressure	Ports	Size mm
ILLEC1242K	615.00	Aluminium	26 bar	SAE #16	330 x 220
ILLEC1260K	780.00				540 x 220
ILLEC1290K	965.00				540 x 320
ILLEC1292K	1050.00				540 x 420
ILLEC1296K	1600.00			SAE #20	540 x 630

Specific cooling performance

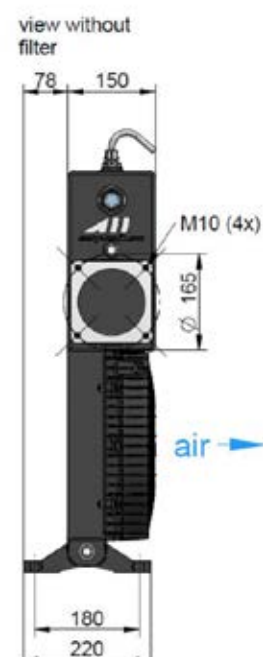
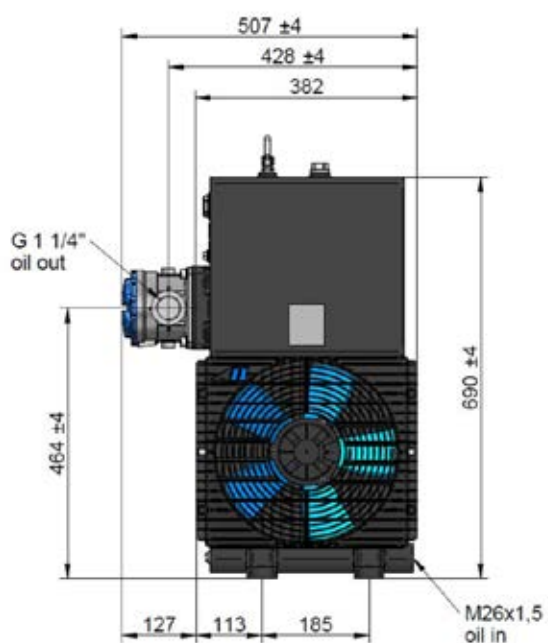


Pressure drop at 30°C

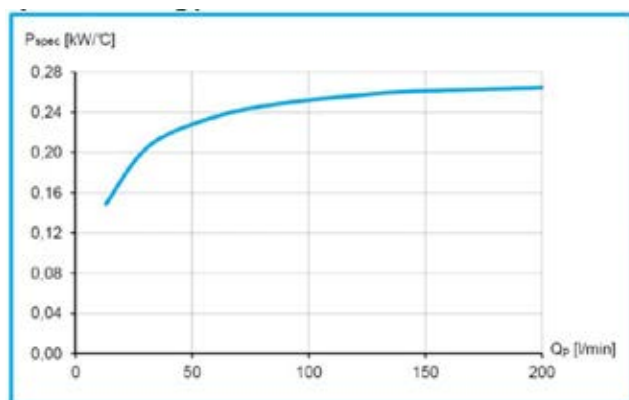


Oil/Air Cooler with Integrated Suction Filter & Tank

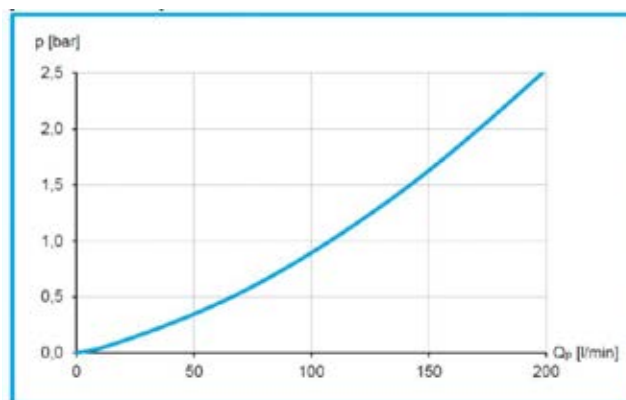
Part Number	List Price \$	Motor	Current	Voltage	Max Pressure	Protection	Tank
ILLCO1101FTF	1881.00	0.25 kW	15.0a	12v	1.2 bar	IP68	12 ltr
ILLCO1102FTF	1881.00		7.7a	24v			



Specific cooling performance



Pressure drop at 30°C



Temperature Controller DC

Part Number	List Price \$	Max Power Fan Motor	Max Current Fan	Protection	Weight	Supply
ILLZTC12-2K	370.00	310w	21a (14, 7V DC)	IP67	0.25kg	12v DC (9v-15v)
ILLZTC24-2K	370.00	340w	12a (24v DC)			24v DC (18v-32v)



When using with ILLZTT5069K sensor:
Fan rotation is controlled according to actual oil temperature from 45°C to 55°C (maximum fan speed reached).

When using with any IP69 type switch:
Only on/off function, with the advantage that start current is ramped up by controller, saving duration of the fan motor.

Energy Saving

Reduced Noise Level

EMC Compatibility

Characteristics	Material	Polyamide
	Mounting Instructions	Any mounting position
	Temperature Sensor	ILLZTT5069K (control range 44-45°C)
Measurement Input	Temperature Switch	ILLZTH5069K (set point 50°C, soft start)
		ILLZTH6069K (set point 60°C, soft start)
		ILLZTH9069K (set point 90°C, soft start)
Ambient Conditions	Ambient Temperature Range	-20°C to +85°C
	Storage Temperature Range	-60°C to +110°C
Combinations	12v & 24v DC Coolers	LL04, LL06 / TT07 - 25 rail / ASA0177 - 0367

Temperature Controller AC

Part Number	List Price \$	Voltage	Range	Protection	Weight
ILLZTCACK	370.00	115/230v AC	-30 to +120°C	IP40	0.56kg

Characteristics	Material Housing	Steel sheet metal, powder coated
	Mounting Instructions	Any mounting position
	Switch Control Range	-30°C to +120°C
Operation	Contacts Rating	C.1-10(2,5)a/250v
		C.2-6(2,5)a/250v
Ambient Conditions	Maximum Head Temperature	+85°C
	Maximum Bulb Temperature	+150°C
	Storage Temperature Range	-15°C to +55°C
Combinations	For use with TT07-TT25 only	



Temperature Sensors

Part Number	List Price \$	Description	Connection	Protection	Weight
ILLZTT5069K	146.00	Temperature Sensor BSP 1/2"	AMP superseal 1.5	IP 69K	0.09kg

Characteristics	Screw Part Material	Brass
	Mounting Instructions	Any mounting position
	Maximum Tightening Torque	50 Nm
Ambient Conditions	Oil Temperature Range	-20°C to +100°C
	Ambient Temperature Range	-20°C to +85°C
	Storage Temperature Range	-60°C to 110°C
Required Accessories	Temperature Control Unit 12v DC	ILLZTC12-2K
	Temperature Control Unit 24v DC	ILLZTC24-2K
Combinations	12v & 24v DC Coolers	LL04, LL06 / TT07 - 25 rail / ASA0177 - 0367



Temperature Switches

Part Number	List Price \$	Connection	Protection	Weight	Switch Temperature
ILLZTH5069K	146.00	AMP Superseal 1.5	IP 69K	0.10kg	50°C +/-5
ILLZTH6069K	146.00				60°C +/-5
ILLZTH9069K	146.00				90°C +/-5

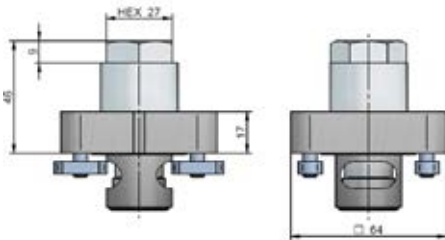
Characteristics	Screw Part Material	Brass
	Mounting	Any position
	Maximum Tightening Torque	50 Nm
Measurement Output	Number Of Cycles	100,000
	Counter Connector	Included
	Contact	N.O. (Normal Open)
Ambient Conditions	Minimum Current	200ma
	Maximum Current	12v AC (10a) 24v AC (10a) 120v AC (15a) 230v AC (10a)
	Oil Temperature Range	-20°C to +100°C
Combinations	Ambient Temperature Range	-20°C to +85°C
	Storage Temperature Range	-60°C to 110°C
		All 1/2" BSPP Coolers & Connectors



Part Number	List Price \$	Connection	Protection	Weight	Switch Temperature
ILLZTH4765K	146.00	ISO 4400	IP 65	0.09kg	50°C +/-5
ILLZTH6065K	146.00	ISO 4400			60°C +/-5

Temperature Bypass Valve (TT Series only)

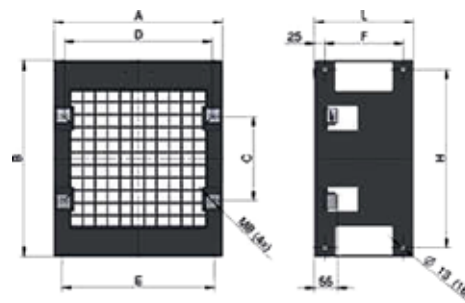
Part Number	List Price \$	To suit	Max Work Temp	Relief Temp	Closing Temp	Max Pressure
ILLZBPT5022K	1005.00	TT Rail TT07-TT13	80°C	< 58°C	50-60°C	26 bar
ILLZBPT5027K	1005.00	TT Rail TT16-TT25				


Foot Mounting Kits

Part Number	List Price \$	Description
ILLEFUSSTT06K	97.00	Mounting feet set (fits TT06)
ILLEFUSSTTK	97.00	Mounting feet set (fits TT07-25)
ILLEFUSSTTHDK	186.00	Heavy duty mounting feet set (fits TT07-25)

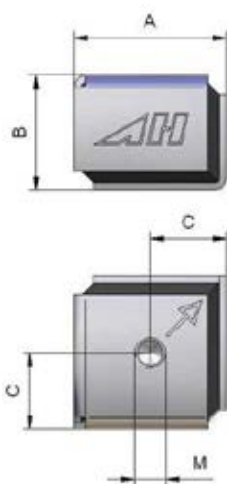

Protection Housings

Part Number	List Price \$	Description
ILLEGAKTT07GT	1090.00	Protection housing kit TT07 Rail
ILLEGAKTT11GT	1210.00	Protection housing kit TT11 Rail
ILLEGAKTT16GT	1370.00	Protection housing kit TT16 Rail



Rubber Vibration Absorbers

Part Number	List Price \$	Description	Material	Weight kg	M	A	B mm	C
MDGQ403008IIK	24.00	40x40x30 M8	Zinc coated steel and natural rubber	0.127	M8 x 10	40	30	20
MDGQ504510IIK	57.00	50x50x45 M10		0.280	M10 x 12	50	45	25
MDGQ755512IIK	97.00	75x75x55 M12		0.659	M12 x 15	75	55	37.5
MDGQ1007516IIK	405.00	100x100x75 M16		1.920	M16 x 16.5	100	75	50



*Assembly note:
all 4 arrows have to point
towards the middle*

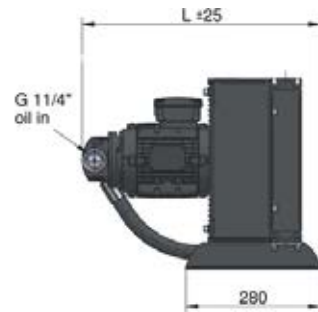


Contact us for further
technical information

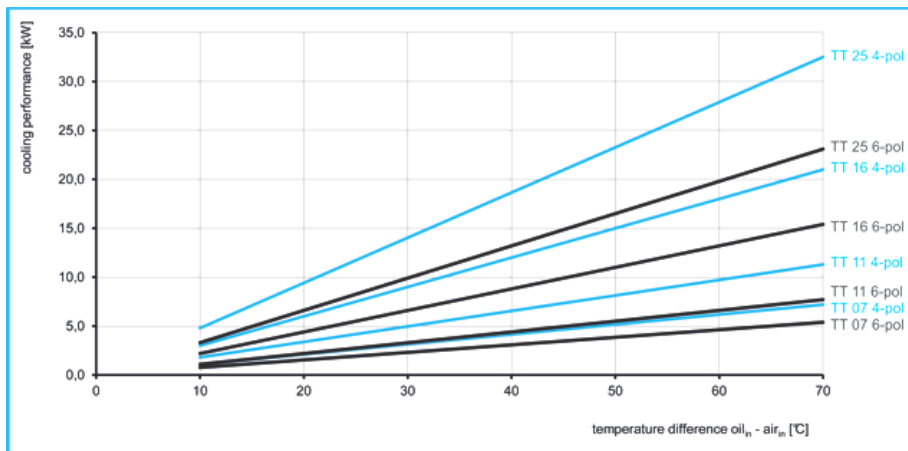


CC Series - TT Rail - AC (Gerotor Pump)

Part Number	List Price \$	Motor Size	Max Pressure	Flow	A	N mm	L
ASATT07RA47CC	4220.00	0.75kW 4P 415v	10 bar	30 lpm	355	320	493
ASATT11RA47CC	4540.00				395	380	495
ASATT16RA47CC	5220.00				520	460	511
ASATT25RA47CC	6200.00		7 bar		660	558	511



air →



Must use with connector kits for ports, see below

See page 303 for options

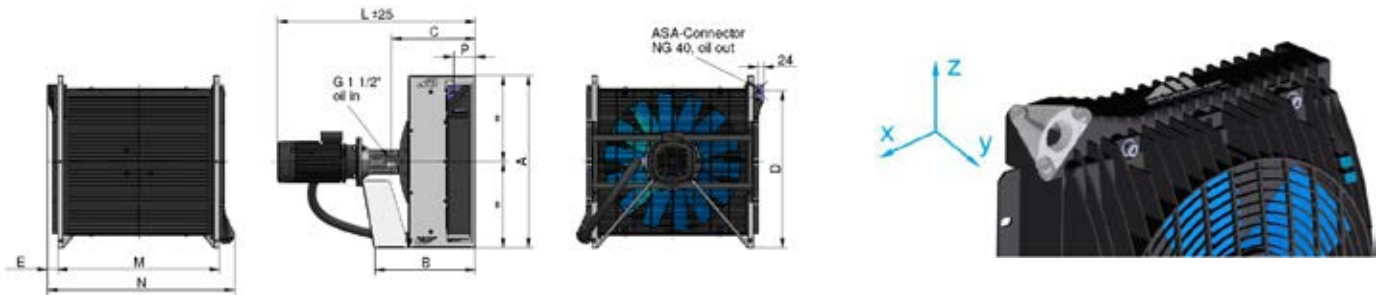
Larger sizes available on request

Connector Kits

Part Number	List Price \$	Port Size	Type
ILLZATT53G25K	80.00	1" BSPP	Rail connector

CC Series - Offline - AC (Screw Pump)

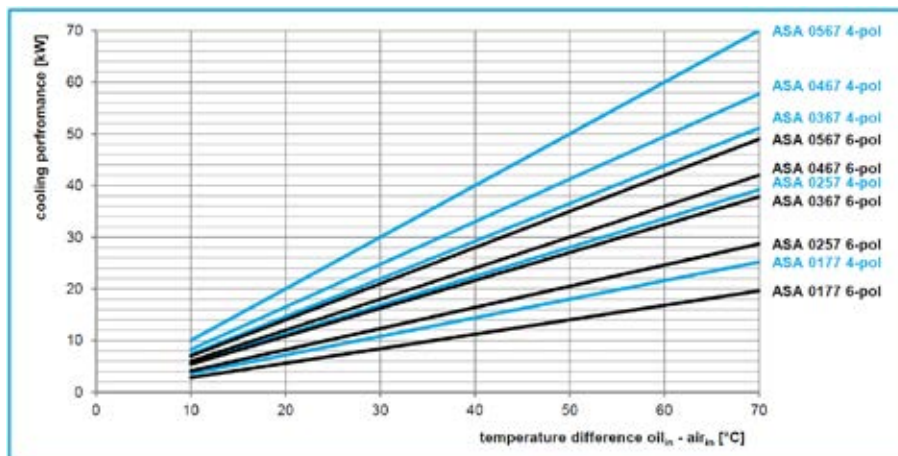
Part Number	List Price \$	Motor Power	Motor Current	Oil Flow	Max Pressure	Weight kg	A	B	L	N
ASA0177AA49CC	9920.00	1.5 kW 4P	3.35a	60 lpm	10 bar	70.7	530	400	807	601
ASA0257AA49CC	10690.00					80	635	410	817	701
ASA0367AA49CC	11630.00				8 bar	90.4	720	420	827	781
ASA0467AA49CC	13550.00					107.7	785	420	837	856
ASA0567AA49CC	13610.00					108.1	860	410	837	931
ASA0177AA68CC	9920.00	0.75 kW 6P	1.95a	40 lpm	9 bar	66.7	530	400	807	601
ASA0257AA68CC	10690.00					76	635	410	817	701
ASA0367AA68CC	11630.00				8 bar	86.4	720	420	827	781
ASA0467AA68CC	13550.00					103.7	785	420	837	856
ASA0567AA68CC	13610.00					104.1	860	410	837	931



Must use with connector kits for ports, see page 300



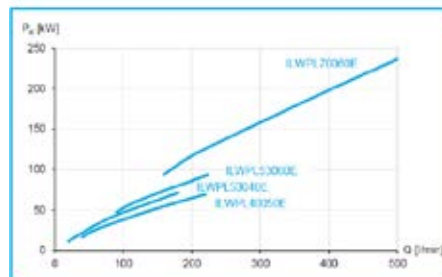
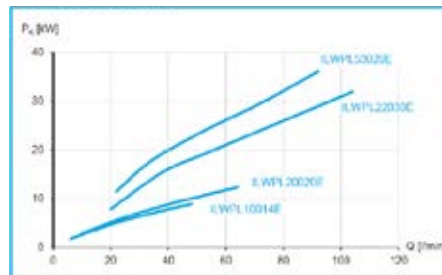
Specific cooling performance



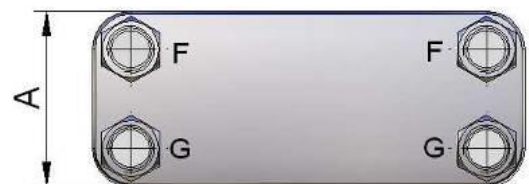
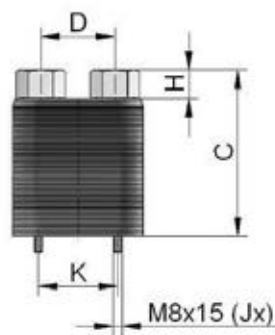
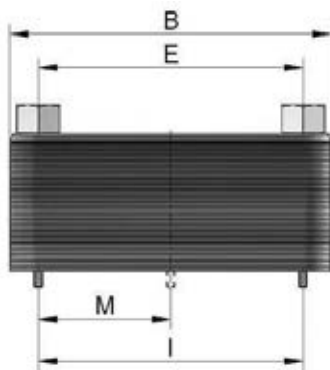
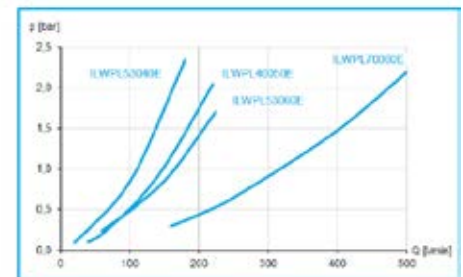
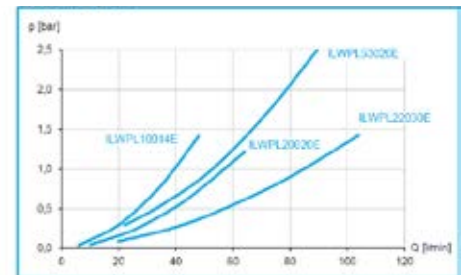
Brazed Plate Heat Exchangers

Part Number	List Price \$	Max Pressure	Ports F/G	A	B	C	D
mm							
ILWPL10014EK	325.00	30 bar	1/2" BSPP	73	205	64.5	42
ILWPL20020EK	440.00		3/4" BSPP	80	194	82	40
ILWPL22030EK	850.00		1" & 3/4" BSPP	106	306	109	50
ILWPL22060EK	1240.00					181	
ILWPL40050EK	1325.00		1" BSPP	124	304	157	70
ILWPL53020EK	990.00				504	85	64
ILWPL53040EK	1510.00					133	
ILWPL53060EK	1960.00					181	
ILWPL70020EK	2110.00		1.1/2" BSPP	246	528	86.5	174
ILWPL70060EK	3795.00					183	
ILWPL70120EK	7165.00					327	
ILWPL70160EK	9220.00					423	

Specific cooling performance

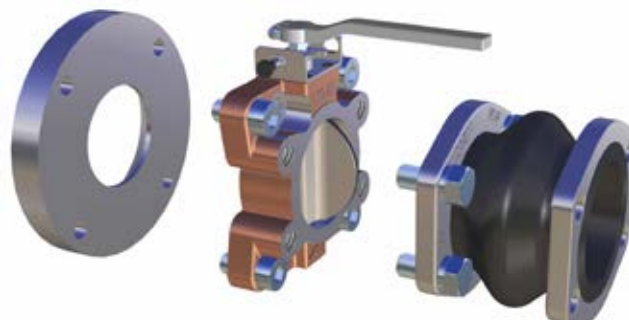


Pressure drop



Suction Butterfly Valves

Part Number	List Price \$	Size	Max Work Pressure / Differential Pressure
SDA0040	430.00	DIN40 SAE 1.1/2"	7 bar / 6 bar
SDA0050	478.00	DIN50 SAE 2"	
SDA0063	500.00	DIN65 SAE 2.1/2"	
SDA0080	560.00	DIN80 SAE 3"	
SDA0100	670.00	DIN100 SAE 4"	
SDA0125	790.00	DIN125 SAE 5"	



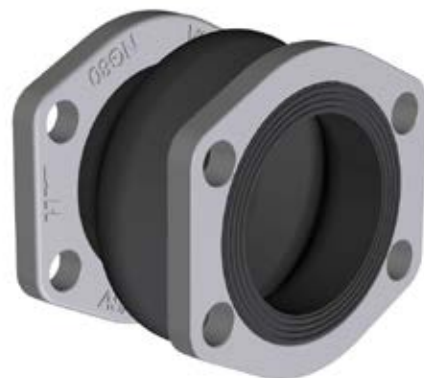
Adaptor Flange

Part Number	List Price \$	Description	Material
SDAET040K	186.00	Adaptor NG40	ST37 Steel
SDAET063K	202.00	Adaptor NG50 & 63	
SDAET080K	218.00	Adaptor NG80	
SDAET100K	290.00	Adaptor NG100	
SDAET125K	348.00	Adaptor NG125	



Compensators - SAE

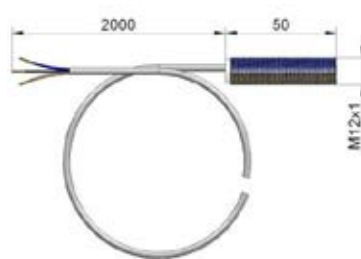
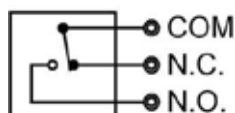
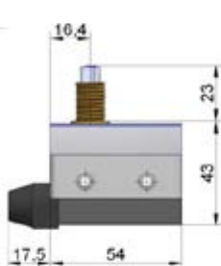
Part Number	List Price \$	Size	Material	Max Working Pressure
SDKSS025	356.00	NG25 SAE 1"	NBR/CR Steel	1.5 bar (absolute)
SDKSS032	356.00	NG32 SAE 1.1/4"		
SDKSS040	365.00	NG40 SAE 1.1/2"		
SDKSS050	380.00	NG50 SAE 2"		
SDKSS063	380.00	NG63 SAE 2.1/2"		
SDKSS080	396.00	NG80 SAE 3"		
SDKSS092	494.00	NG90 SAE 3.1/2"		
SDKSS100	535.00	NG100 SAE 4"		
SDKSS126	882.00	NG125 SAE 5"		


High Pressure Compensators - DIN

Part Number	List Price \$	Size	Material	Nominal Pressure
SDKHHDD6D60032N00	441.00	NG32	NBR/CR Steel	Up to 16 bar
SDKHHDD6D60040N00	467.00	NG40		
SDKHHDD6D60050N00	486.00	NG50		
SDKHHDD6D60065N00	557.00	NG65		
SDKHHDD6D60080N00	680.00	NG80		
SDKHHDD6D60100N00	842.00	NG100		
SDKHHDD6D60125N00	1037.00	NG125		
SDKHHDD6D60200N00	1283.00	NG200		
SDKHHDD6D60300N00	2411.00	NG300		

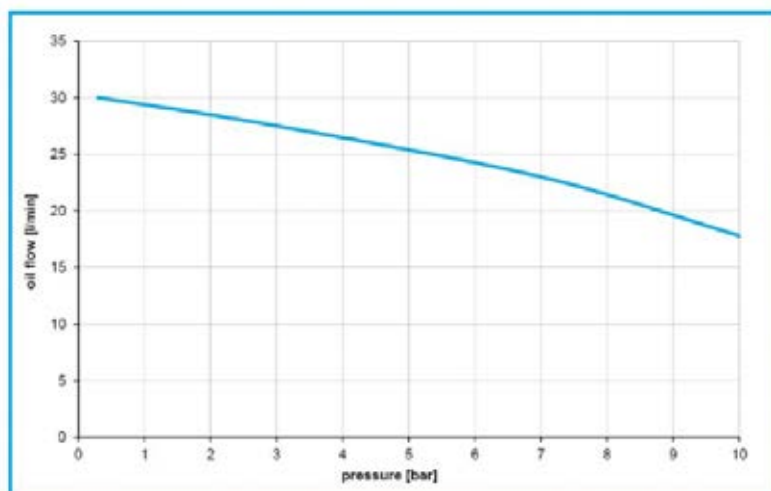
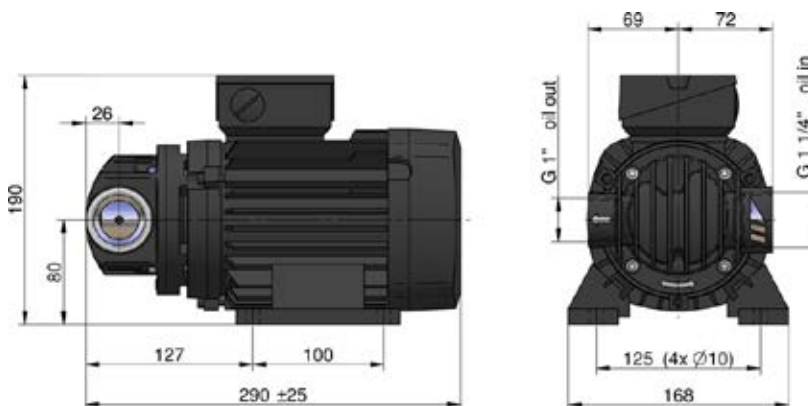

Limit Switches

Part Number	List Price \$	Description
EAFSMK	72.00	Mechanical Limit Switch
EAFSIK	146.00	Inductive Limit Switch



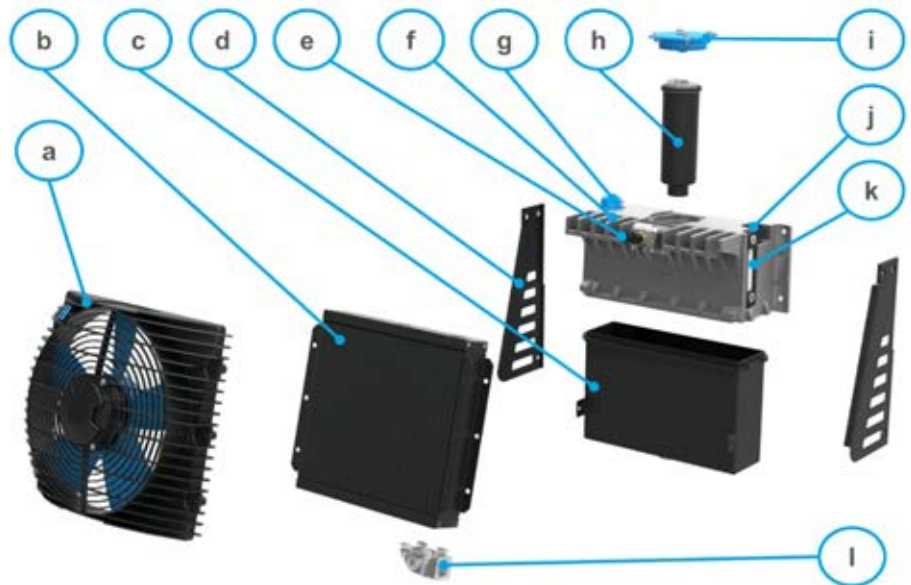
Gerotor Pump Unit - 30 lpm, 230/400v 50Hz

Part Number	HY0200758G	HY201108G
List Price \$	2482.00	3840.00
Motor Power	0.75 kW	1.10 kW
Max Oil Viscosity	100 cSt	250 cSt
Max Current	2.1a	2.6a
60 Hz	Possible, 276/480v	On request
Weight	13.8 kg	16.6 kg
Oil Flow	30 lpm	
Neg. Pressure	-0.4 bar	
Poles	4	
Ambient Temperature	-20°C to +40°C	
Max Working Pressure	10 bar	
Max Oil Temperature	80°C (100°C on request)	
Fluids	Mineral oils	
Pump Housing	Aluminium	
Gerotor	Sintered Steel	



Design your own H-cube!

- fan drive unit (a)
- cooler radiator (b)
- tank (c)
- side frames (d)
- electric clogging indicator(e)
- integration block (f)
- breather (g)
- filter (h)
- filter cap (i)
- optical clogging indicator (j)
- tank level gauge (k)
- connector with temperature switch port (l)



The integration block connects tank, filter and heat exchanger. These components can be, individually, varied in size and function. As a result of that, the system is able to customize to the application, while keeping a proven standard range product. Also integrated are tank level gauge, bypass valve, clogging indicator and temperature switch port. Due to this flexible system, all parts can be combined with the same control flange. The table below shows the possible options and its resulting code.

A H T 1 B B 1 1 H 0 3 P V S I B 0 0
 1 2 3 4 5 6 7 8

1 Product Series

AH	ASA H-Cube

2 Tank Size*

T1	tank with 17l (EU**)
T2	tank with 23l (EU**)
T3	tank with 30l (EU**)
R5	tank with 4.5gal (US**)
R6	tank with 6.1gal (US**)
R8	tank with 7.9gal (US**)

3 Filter Combinations

	return filter	suction filter
00	none	none
B0	6µm (max.88lpm)	none
C0	10µm (max.180lpm)	none
D0	16µm (max.185lpm)	none
E0	25µm (max.195lpm)	none
0B	none	90µm
BB	6µm (max.88lpm)	90µm
CB	10µm (max.180lpm)	90µm
DB	16µm (max.185lpm)	90µm
EB	25µm (max.195lpm)	90µm

4 Cooler Size/Type

07	TT 07 rail, 2bar(30psi) bypass
11	TT 11 rail, 2bar(30psi) bypass
16	TT 16 rail, 2bar(30psi) bypass
25	TT 25 rail, 2bar(30psi) bypass

5 Fan Drive

D01	12V DC
D02	24V DC
H03	3cm ³ hydraulic

6 Accessories & Options***

000	no options
00S	only stainless steel housing
KT0	temperature control DC
KTS	temp. control & stainless steel housing
PVS	tanker truck ¹⁾ block 210bar (3040 PSI) & stainless steel housing
PHS	tanker truck ¹⁾ block 350 bar (5070 PSI) & stainless steel housing

7 Clogging Indicator

0	no indicator
I	optical clogging indicator
E	electric clogging indicator
C	combined opt. & elect. indicator

8 Index / Customized

Bxx	special / customized specifications, to be advised e.g. position of connectors, special connectors, etc...

* complete system content.

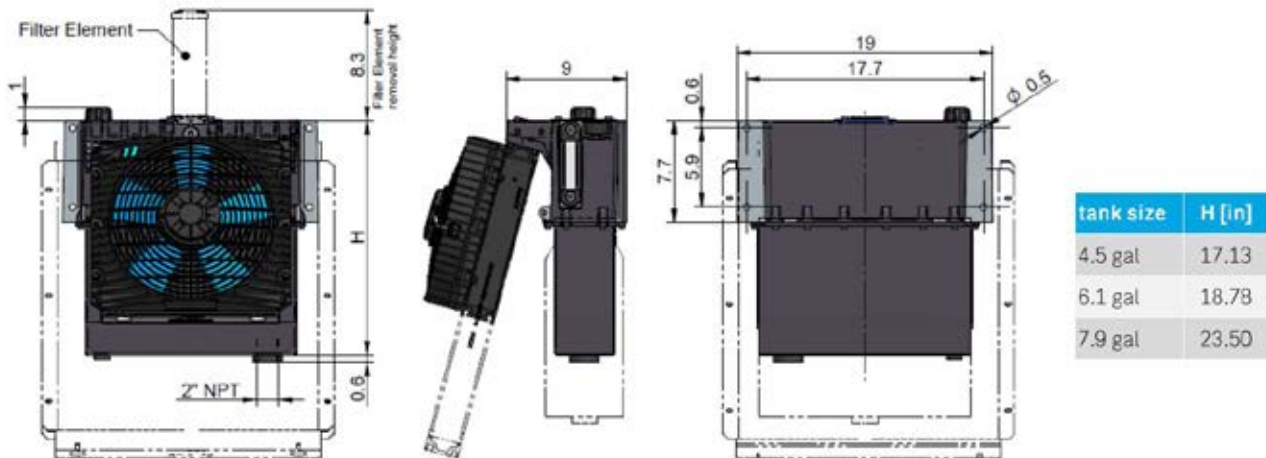
** EU version truck frame flange 150 x 450mm and BSP suction port
US version truck frame flange 5.5 x 17.5inch and NPT suction port

*** stainless steel and protection housing not in combination with cooler size TT 25!

¹⁾ Tanker Truck configuration includes the functions of a adjustable pressure relief valve for the whole hydraulic system, return line connection and hydraulic fan drive control -> see more information on the H-Cube data sheet, page 5 or contact us for further assistance.

H-Cube Series (US Version)

Part Number	List Price \$	Tank Size	Filter	Cooler Size	Fan Drive	Options	Clogging Indicator
AH R5 DO 16 D02 KTO I	6391.00	4.5 gallon	16µm return filter (1.75 bar bypass)	TT16 Rail 2 bar bypass	24v DC	Temperature Control DC	Optical
AH R8 DO 16 D02 KTO I	6464.00	7.9 gallon					
AH R5 DO 16 H03 PVS 000 I	12030.00	4.5 gallon			3cc Hydraulic	Stainless Steel Housing (with adjustable inbuilt relief system 210 bar)	
AH R8 DO 16 H03 PVS 000 I	12105.00	7.9 gallon					

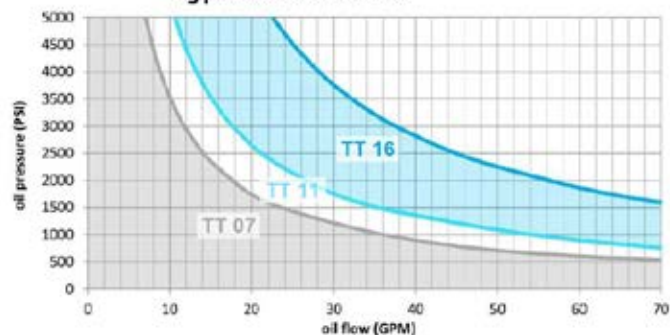


The actual performance output of the H-cube system is a combination of the cooler size (radiator core) and the type of fan drive. Choose the possible performances from the table below. The shown performance is the maximum possible specific cooling performance depending on the oil flow.

Heat dissipation in HP at 80°C temperature difference and 12V fan drive

cooler type	20 gpm	40 gpm	60 gpm
TT 07	16	16	
TT 11	26	28	29
TT 16	38	41	42
TT 25	67	71	73

Heat dissipation range (hydraulic drive) by pressure and oil flow

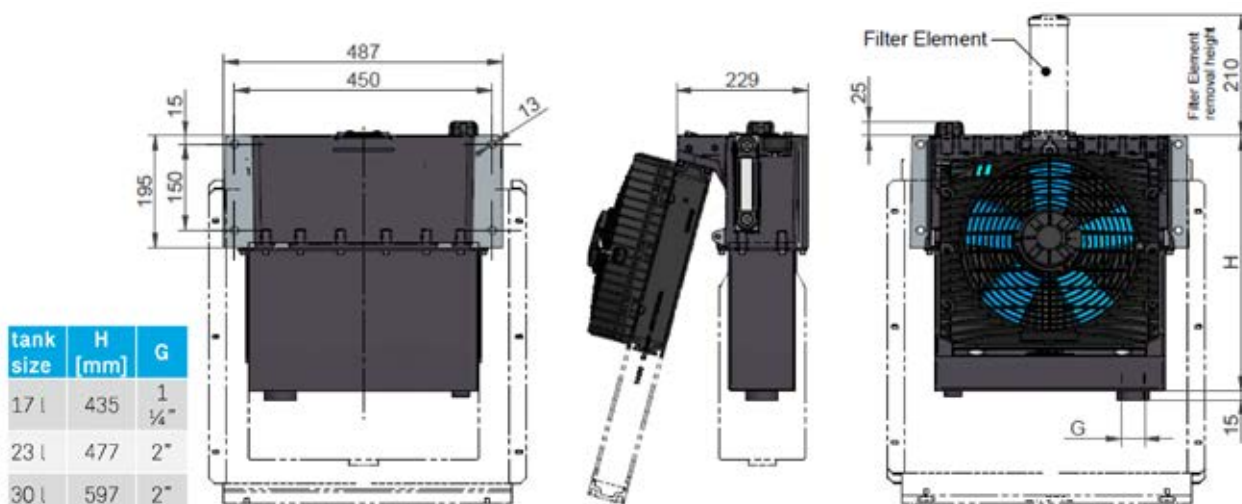
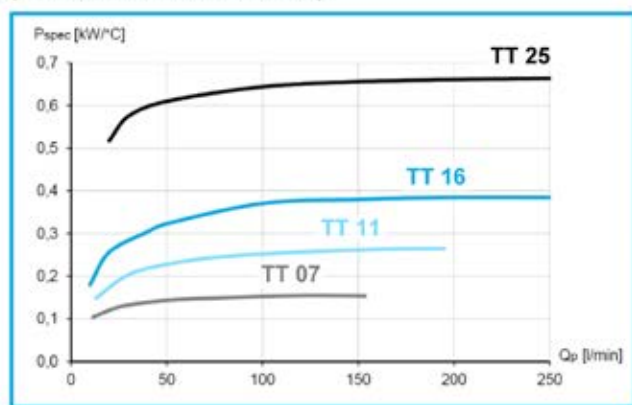
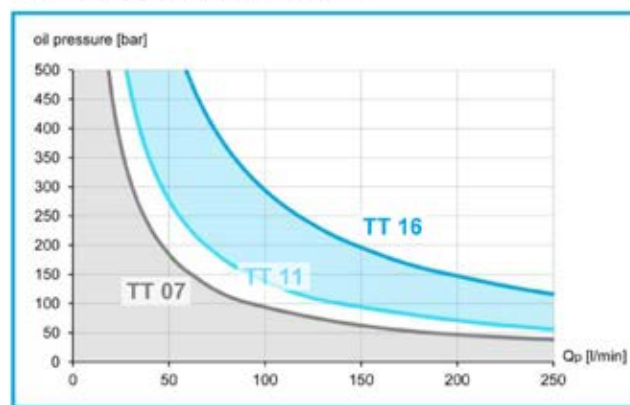


radiator material	brazed aluminium
radiator air fin	wavy
tank material	steel
integration block	anodized cast aluminium

return filter / suction filter	3 µ to 25 µ with 25 PSI or 44 PSI bypass
fan drive	12V or 24V DC
standard air flow direction	pulling
weight (dry)	55 lbs to max. 100 lbs

H-Cube Series (EU Version)

Part Number	List Price \$	Tank Size	Filter	Cooler Size	Fan Drive	Options	Clogging Indicator
AH T3 DO 25 D02 KTO E	7606.00	30 litre	16µm return filter (1.75 bar bypass)	TT25 rail 2 bar bypass	24v DC	Temperature Control DC	Electric


specific cooling performance
(with 12V or 24V DC fan drive)

cooling performance range (tanker truck types),
to select by pressure and oil flow


radiator material	brazed aluminium
radiator air fin	wavy
tank material	steel
integration block	cast aluminium

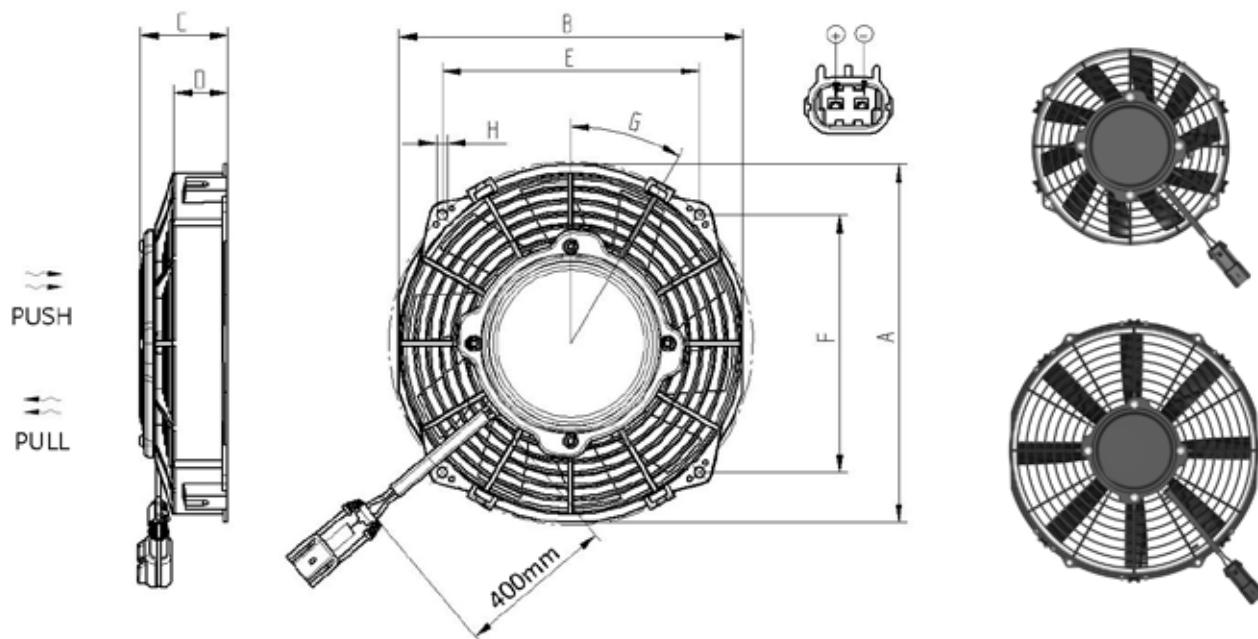
return filter rating	6 µ to 25 µ with 1,75 bar bypass
suction filter rating	90 µ (other micron on request)
fan drive	12V or 24V DC
weight (dry)	25 kg to max. 50 kg

MBD Series 12V

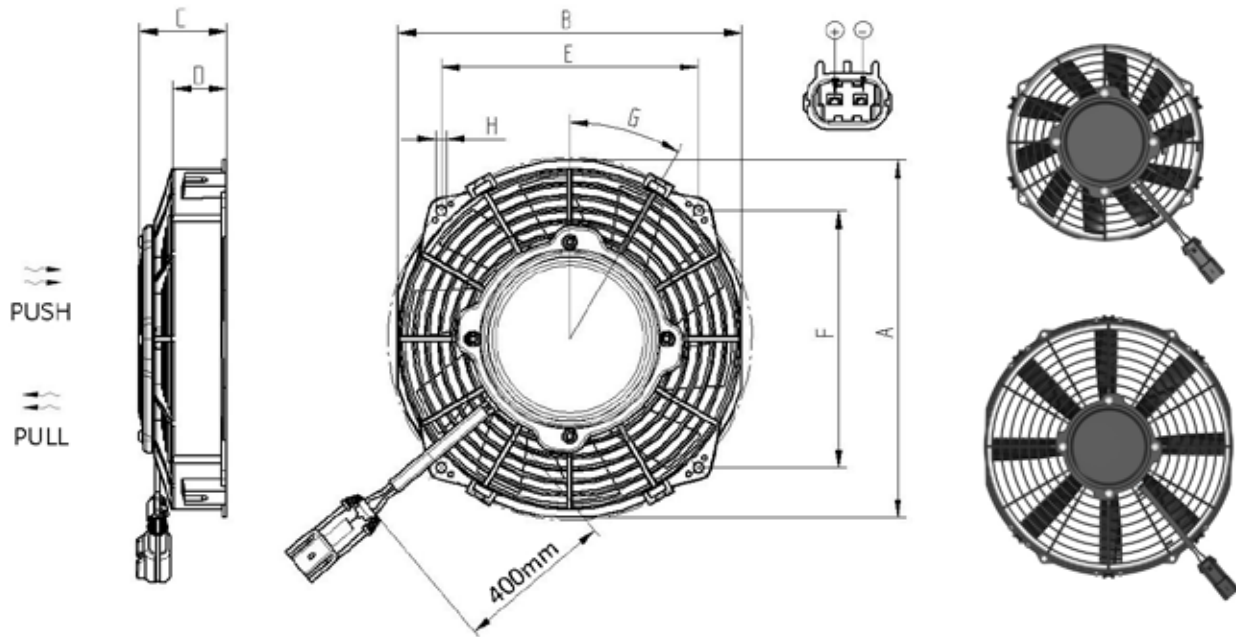
318

MBD Series 24V

319

MBD Series 12 Volt Fan - IP68


Part Number	List Price \$	Airflow	Power (watt)	Current (amp)	Dimensions (mm)					
					A	B	C	D	E	F
MBD1-190-A12H-AAA	243.00	Push	85	6.6	210	202	52	32	151	151
MBD1-190-A12H-BAA	243.00	Pull	102	7.9	210	202	52	32	151	151
MBD1-225-A12H-AAA	243.00	Push	83	6.4	247	238	52	28	139	206
MBD1-225-A12H-BAA	243.00	Pull	96	7.4	247	238	52	28	139	206
MBD1-255-A12H-AAA	252.00	Push	108	8.3	284.5	269	52	28	142	247
MBD1-255-A12H-BAA	252.00	Pull	111	8.5	284.5	269	52	28	142	247
MBD2-280-B12H-AAA	306.00	Push	121	9.3	310	294	64.5	28	155	269
MBD2-280-B12H-BAA	306.00	Pull	142	10.9	310	294	64.5	28	155	269
MBD2-305-B12H-AAA	315.00	Push	163	12.6	336	321	64.5	28	168	291.5
MBD2-305-B12H-BAA	315.00	Pull	150	11.5	336	321	64.5	28	168	291.5
MBD3-350-C12H-AAA	351.00	Push	242	18.6	383	367	74	28	191	331
MBD3-350-C12H-BAA	351.00	Pull	239	18.3	383	367	74	28	191	331
MBD3-385-C12H-AAA	360.00	Push	223	17.2	414	400	74	28	206.5	385.5
MBD3-385-C12H-BAA	360.00	Pull	245	18.8	414	400	74	28	206.5	385.5

MBD Series 24 Volt Fan - IP68


Part Number	List Price \$	Airflow	Power (watt)	Current (amp)	Dimensions (mm)					
					A	B	C	D	E	F
MBD1-190-A24H-AAA	243.00	Push	78	3.0	210	202	52	32	151	151
MBD1-190-A24H-BAA	243.00	Pull	89	3.4	210	202	52	32	151	151
MBD1-225-A24H-AAA	243.00	Push	107	4.1	247	238	52	28	139	206
MBD1-225-A24H-BAA	243.00	Pull	110	4.2	247	238	52	28	139	206
MBD1-255-A24H-AAA	252.00	Push	118	4.5	284.5	269	52	28	142	247
MBD1-255-A24H-BAA	252.00	Pull	119	4.6	284.5	269	52	28	142	247
MBD2-280-B24H-AAA	306.00	Push	117	4.5	310	294	64.5	28	155	269
MBD2-280-B24H-BAA	306.00	Pull	128	4.9	310	294	64.5	28	155	269
MBD2-305-B24H-AAA	315.00	Push	172	6.6	336	321	64.5	28	168	291.5
MBD2-305-B24H-BAA	315.00	Pull	177	6.8	336	321	64.5	28	168	291.5
MBD3-350-C24H-AAA	351.00	Push	231	8.9	383	367	74	28	191	331
MBD3-350-C24H-BAA	351.00	Pull	231	8.9	383	367	74	28	191	331
MBD3-385-C24H-AAA	360.00	Push	252	9.7	414	400	74	28	206.5	385.5
MBD3-385-C24H-BAA	360.00	Pull	248	9.5	414	400	74	28	206.5	385.5

ABOUT US

The Company

Hydraulics Network Pty Ltd are a privately owned independent wholesaler that was started in Melbourne by Managing Director Chris Kennedy in 2005. We began life as a supplier of hydraulic cylinders - and as the company and the industry evolved, our range of products has expanded. We are now a leading supplier of thousands of high-quality parts from major hydraulics manufacturers around the world.

The head office has been in Williamstown since the beginning, but at the end of 2020 we relocated to our new custom-built premises in Epping, in Melbourne's north. This will enable us to keep an even more extensive inventory of stock to provide quality and reliable service to our customers.

In 2013 we opened a second branch of Hydraulics Network in Brisbane, and we have authorised distributors all over Australia.

Mission Statement

Hydraulics Network strive to be the best genuine wholesaler to the hydraulics industry in Australia, providing the best quality products and the best service to our customers.

Stock & Distribution

Across our Melbourne and Brisbane warehouses we keep a stock of ALL the items listed in this catalogue, enabling our experienced sales teams us to supply our customers both quickly and effectively.

Disclaimer

We reserve the right to change our prices or discontinue any of the products in this catalogue without notice.

Copyright

All rights reserved ©2021

Any information in this catalogue may only be reproduced with the written permission of Hydraulics Network.

TERMS & CONDITIONS

Warranty

Although we will use our best endeavours to satisfy any customer complaint in relation to our products, Hydraulics Network will be under no liability to the customer for any damages or losses (direct or indirect) resulting from defects in design, materials or workmanship.

Our warranty period is for 12 months from date of purchase (24 months for hydraulic cylinders).

Any products/parts replaced will be supplied on the same conditions and with the same warranty, commencing on the date of delivery of the replaced product or part.

If all or part of a product is repaired, the product or part of it will be supplied on the same terms and conditions as the original product or part.

Returns

Return of products will not be accepted unless Hydraulics Network has received a substantiated written claim within 14 days from the date of delivery. Prior authorisation must be obtained from Hydraulics Network before the customer returns a product.

On return, products must be accompanied by appropriate documentation stipulating the original invoice number.

Hydraulics Network accepts no liability for defects caused by the customer's installation of the products.

If the products have been modified or repaired, or the products have not been used, stored or maintained as recommended by Hydraulics Network, your claim may be rejected.

Where the customer has failed to observe the terms of payment for the product, or any other obligation imposed by our Terms & Conditions, your claim may be rejected.

A restocking fee may be charged at the discretion of Hydraulics Network.

Prices

All prices stated in this catalogue are in Australian Dollars, and exclude GST.

All costs associated with cartage, insurance and haulage are not included in this catalogue and are the sole responsibility of the customer unless otherwise agreed.

While every effort is made to ensure the prices in this catalogue are correct, Hydraulics Network fully reserve the right to change these prices without notice.

Delivery

Hydraulics Network will not be responsible for any delays arising from individual dispute or causes outside of it's control.

Our full terms & conditions can be found on our website at www.hydraulicsnetwork.com.au

Hydraulics Network

Our branches:

MELBOURNE

23 Quinlan Road, Epping
VIC 3076

☎ 03 9399 8957

✉ sales@hydraulicsnetwork.com.au

BRISBANE

29 Annie Street, Coopers Plains
QLD 4108

☎ 07 3277 5969

✉ salesqld@hydraulicsnetwork.com.au

www.hydraulicsnetwork.com.au